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A

SUPPLEMENT

To a BOOK,

ENTITULED,

A

TREATISE

ON THE

DELUGE.

Illuſtrated by a COPPER-PLATE, repreſenting the State of the
Earth during the height of the Deluge.

By *A. CATCOTT.* K

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ADVERTISEMENT.

SOON *after the publication of the* firſt *edition of* my Treatiſe on the Deluge, *I received ſeveral letters from gentlemen of character and note, in the learned world, for their knowledge of the ſubject therein treated. Some of theſe letters contained exceptions to particular poſitions in the tract, deſiring a farther explication and a fuller confirmation of them. Now in order to give ſatisfaction in this particular, I have printed a* Second Edition, *inſerting in their reſpective Places a Reply to the Objections, and have alſo added whatever elſe I thought might be of ſervice to illuſtrate or confirm the Tenets advanced. Only one thing I muſt mention, that ſome of theſe Objections aroſe from inattention to the manner in which the ſubject is treated; eſpecially where the proofs were not thought ſufficient for the points advanced. It may be proper therefore to advertiſe the reader that the evidence on which the Tract is built, is threefold*—Scripture—Heathen Hiſtory—

and the Natural ſtate of the Earth. *So that where one of theſe may ſeem defective in proof, by the coalition of the other two, the Point may be clear and manifeſt; and in many places where the evidence was of a* combined *or* mixed *nature, it was proper to drop part of it, that each ſpecies of proof might be diſpoſed under its proper head. So that I hope for the future, no one will judge of any particular tenet 'till the* whole book *be carefully peruſed, and the evidence produced under* each general diviſion *for any point in queſtion be accurately examined.*

As the Additions *to the* ſecond Edition *are conſiderably large, I have printed them in this manner,* ſeparate *from the work, by way of* Supplement, *that thoſe who have the firſt Edition may purchaſe them without being under the neceſſity of procuring the whole for the ſake of a part.*

A
SUPPLEMENT
TO A
TREATISE
ON THE
DELUGE.

Page 1. line 1. THE Knowledge of the *natural State of the Earth* is the *foundation* of *all true Philoſophy.*

If we are miſtaken in our judgments of Cauſes and Effects, relative to things that are within our reach, and on which we can make immediate obſervations and experiments, we ſhall certainly be ſo, with reſpect to Thoſe that are at a diſtance from us; and of which we can only reaſon by *Analogy*.

Now of all events that have happened to the Earth, there is none that has made a greater noiſe in the world, or has left ſuch evident marks of its Reality, as that of a *Flood of Waters*, in which the whole Globe was drowned.

And if it can be proved, that the Earth has actually been thus covered by water, and totally diſſolved therein, ſuch an Event as this, I ſay, muſt have made many and great alterations in the before-ſtate of the Earth, and be the *Cauſe* of *many remarkable phænomena* in the *preſent.* And yet, I am ſorry to ſay it, philoſophers in general, who have endeavoured to explain the whole Syſtem of Nature, and many who have wrote in particular on the Subject of the *Earth*, have taken no notice of this great Event; and thereby have been led themſelves, and alſo have led others, into a variety of errors, by aſcribing Effects to very different Cauſes than the true.

I hope, therefore, that an Attempt to lay before the publick the *Evidence* that may be brought in proof of an Universal Deluge, and to exhibit a *diſplay* of all the *various Effects*, both *on* and *in* the Earth, that were owing to that *one Great Cauſe*, may not be uninſtructing, nor unentertaining.

Page 22. l. 30.—In order to ſhew that the Ark, as deſcribed by *Moſes*, was ſuitably capacious for its intended Contents, I ſhall here annex Biſhop *Wilkins*'s Account of this affair in his *Eſſay towards a real character and a philoſophical Language*, p. 162, &c.

" Having now diſpatched (ſays the Biſhop) the enumeration and deſcription of the ſeveral ſpecies of Animals, I ſhall here take leave for a ſhort Digreſſion, wherein I would recommend this, as a thing worthy to be obſerved, namely, *That great difference* which there is betwixt thoſe opinions and apprehenſions which are occaſioned by *a more general* and *confuſed view* of things, and thoſe which proceed from a *more diſtinct conſideration* of them as they are reduced into order.

He that looks upon the Stars, as they are confuſedly ſcattered up and down in the Firmament, will think them to be (as they are ſometimes ſtiled) *innumerable*, of ſo vaſt a multitude, as not to be determined to any ſet number; but when all theſe Stars are diſtinctly reduced into particular Conſtellations, and deſcribed by their ſeveral places, magnitudes, and names, it appears, that of thoſe that are viſible to the *naked* eye, there are but few more than a *thouſand* in the whole Firmament, and but a little more than half ſo many to be ſeen at once in any *Hemiſphere*. It is ſo likewiſe in other things: he that ſhould put the Queſtion, how many ſorts of beaſts, or birds, &c. there are in the world, would be anſwered, even by ſuch as are otherwiſe knowing and learned men, that there are ſo many hundreds of them, as could not be enumerated; whereas, upon a diſtinct inquiry into all ſuch as are yet known, and have been deſcribed by credible Authors, it will appear, that they are much fewer than is commonly imagined, not a hundred ſorts of Beaſts, nor two hundred of Birds.

From this prejudice it is, that ſome hereticks of old, and ſome atheiſtical ſcoffers in theſe later times, having taken the advantage of raiſing objections (ſuch as they think unanſwerable) againſt the truth and authority of Scripture, particularly as to the deſcription which is given by *Moſes*, concerning *Noah*'s *Ark*, *Gen.* vi. 15. where the Dimenſions of it are ſet down to be three hundred Cubits in length, fifty in breadth, and thirty in height, which being compared with the things it was to contain, it ſeemed to them, upon a general view, (and they confidently affirmed accordingly) that it was utterly impoſſible for this Ark to hold ſo vaſt a multitude of Animals, with a whole year's proviſion of food for each of them.

It is plain in the deſcription which *Moſes* gives of the Ark, that it was divided into three ſtories, each of them of ten cubits, or fifteen feet high, beſides one cubit allowed for the declivity of the roof in the upper ſtory. And it is agreed upon as moſt probable, that the lower ſtory was aſſigned to contain all the ſpecies of Beaſts, the middle ſtory for their food, and the upper ſtory, in one part of it, for the Birds and their food, and the other part for *Noah*, his family, and utenſils.

Now it may clearly be made out, that each of theſe ſtories was of a ſufficient capacity for the containing all thoſe things to which they are aſſigned; even ſuppoſing the Cubit to be (at the loweſt computation) but a foot and half in length.

For the more diſtinct clearing up of this, I ſhall firſt lay down ſeveral tables of the divers ſpecies of Beaſts that were to be received into the Ark, with their different kinds of food, containing both the number appointed for each of them, namely, the clean by ſevens, and the unclean by pairs, together with a conjecture (for the greater facility of the calculation) what proportion each of them may bear either to a beef, or a ſheep, or a wolf; and then what kind of room may be allotted to the making of ſufficient ſtalls for their reception.

Beasts *feeding on* Hay.

Number.	Name.	Proportion to Beeves.	Breadth of Stalls. Feet.
2	Horſe	3	20
2	Aſſe	2	12
2	Camel	4	20
2	Elephant	8	36
7	Bull	7	40
7	Urus	7	40
7	Biſons	7	40
7	Bonaſus	7	40
7	Buffalo	7	40
7	Sheep	1	30
7	Sterpciſeros	1	
7	Broad-Tail	1	
7	Goat	1	30
7	Stone-buck	1	
7	Shamois	1	
7	Antelope	1	
7	Elke	7	30
7	Hart	4	30
7	Buck	3	20
7	Rein-deer	3	20
7	Roe	2	36
2	Rhinoceros	8	
2	Camelopard	6	30
131		92	514

Beasts *feeding on* Fruits, *&c.*

Number.	Name.	Proportion to Sheep.	Breadth of Stalls. Feet.
2	Hog	4	20
2	Baboon	2	
2	Ape	2	
2	Monkey	7	
2	Sloth		
2	Porcupine		
2	Hedge-hog		
2	Squirrel		
2	Ginney-pig		
2	Ant-bear	2	
2	Armadillo	2	
2	Tortoiſe	2	

Beasts *feeding on* Hay.

Number.	Name.	Proportion to Sheep.	Breadth of Stalls. Feet.
2	Hare	2	2
2	Rabbet		
2	Marmotto		
30		23	22

Beasts *feeding on* Fleſh.

Number.	Name.	Proportion to Wolves.	Breadth of Stalls. Feet.
2	Lion	4	10
2	Bear	4	10
2	Tyger	3	8
2	Pard	3	8
2	Ounce	2	6
2	Cat	2	6
2	Civet-Cat		
2	Ferret	3	9
2	Polecat		
2	Martin		
2	Stoat		
2	Weaſle		
2	Caſtor		
2	Otter		
2	Dog	2	6
2	Wolf	2	6
2	Fox	2	6
2	Badger		
2	Jackall		
2	Caragua		
40		27	75

In this enumeration I do not mention the mule, becauſe it is a mungrel production, and not to be reckoned as a diſtinct ſpecies. And tho' it be moſt probable, that the ſeveral varieties of beeves, namely, that which is ſtiled *Urus*, *Biſons*, *Bonaſus*, and *Buffalo*, and thoſe other varieties reckoned under *ſheep* and *goats*, be not diſtinct ſpecies from *bull*, *ſheep*, and *goat*; there being much leſs difference betwixt theſe, than there is betwixt ſeveral dogs: and it being known by experience, what various changes are frequently occaſioned in the ſame ſpecies by ſeveral countries, diets, and other accidents; yet I have, *ex abundanti*, to prevent all cavilling, allowed them to be diſtinct Species, and each of them to be clean beaſts, and conſequently ſuch as were to be received in by ſevens. As for the *morſe*, *ſeale*, *turtle*, or *ſea-tortoiſe*, *crocodile*, *ſenembi*; theſe are uſually deſcribed to be ſuch kind of *Animals* as can abide in the water, and therefore I have not taken them into the Ark, tho' if that were neceſſary, there would be room enough for them, as will ſhortly appear. The *ſerpentine-kind*, *ſnake*, *viper*, *ſlow-worm*, *lizard*, *frog*, *toad*, might have ſufficient ſpace for their reception, and for their nouriſhment, in the drein or ſink of the *Ark*, which was probably three or four feet under the floor, for the ſtanding of the beaſts. As for thoſe leſſer beaſts, *rat*, *mouſe*, *mole*, as likewiſe for the ſeveral ſpecies of inſects, there can be no reaſon to queſtion, but that theſe may find ſufficient room in ſeveral parts of the *Ark*, without having any particular ſtalls appointed for them.

It appears by the foregoing tables, that the beaſts of the *rapacious carnivorous kinds*, to be brought into the *Ark* by pairs, were but forty in all, or twenty pairs; which, upon a fair calculation, are ſuppoſed equivalent, as to the bulk of their Bodies and their food, unto twenty-ſeven *wolves*; but for greater certainty, let them be ſuppoſed equal to thirty *wolves*: and let it be farther ſuppoſed, that ſix *wolves* will every day devour a whole *ſheep*, which all men will readily grant to be more than ſufficient for their neceſſary ſuſtenance: according to this computation, five *ſheep* muſt be allotted to be devoured for food each Day of the year, which amounts in the whole to 1825.

Upon theſe ſuppoſitions there muſt be convenient room in the *lower ſtory* of the *Ark*, to contain the fore-mentioned ſorts of beaſts, which were to be preſerved for the propagation of their kinds, beſides 1825 *ſheep*, which were to be taken in as food for the *rapacious beaſts*.

And tho' there may ſeem no juſt ground of exception, if theſe beaſts ſhould be ſtowed cloſe together, as is now uſual in ſhips, when they are to be tranſported for any long voyage; yet I ſhall not take any ſuch advantage, but afford them ſuch fair ſtalls, or cabins, as may be abundantly ſufficient for them in any kind of poſture, either ſtanding, or lying, or turning themſelves, as likewiſe to receive all the dung that ſhould proceed from them for a whole Year.

And that the lower ſtory of the Ark was of a ſufficient capacity for theſe purpoſes, will appear from the following conſiderations.

[a] First, let a partition of fifteen feet wide be marked off, length-ways, at each end of the Ark. Now the breadth of the Ark being ſeventy-five feet, theſe partitions muſt contain in them five Areas of fifteen feet ſquare, and an area of five feet ſquare being ſufficient to contain four ſheep, therefore one of fifteen feet ſquare muſt be capable of thirty-ſix ſheep. Allowing one of theſe areas at each end for ſtairs, there will eight of them remain, (viz. four at each end) to be reckoned for the containing of ſheep; which eight will be capable of receiving 288 *ſheep*.

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[a] The Biſhop has here annexed a *large folio Drawing* of the *lower Story* of the Ark, and of the diſpoſition of the animals in it. But I have endeavoured to repreſent his meaning in ſuch a manner, that the reader may apprehend it, without the Draught; tho' if he be very curious I would adviſe him to refer to that, or rather to a more compleat Drawing, repreſented in the *Gentleman's Magazine* for *February* 1749; wherein *every Story* of the Ark, and the *diſpoſition* of *every thing* that was to be contained therein, are delineated in a moſt judicious manner, from a *Dutch* Author.

Besides theſe partitions at the end, let two other areas be marked off, paſſing along the middle of the floor length-ways of the Ark, each of them 25 feet wide, and about 200 feet long. Now ſuppoſing theſe middle areas to be deſigned alſo for *ſheep*; an area of 25 feet ſquare muſt be capable of holding 100, and there being ſixteen of theſe, they muſt be capable of containing 1600 ſheep, which being added to the former number of 288, will make 1888, ſomewhat more than 1825, the number aſſigned that were to be taken in for food.

On each ſide of the middle areas for the ſheep, let us ſuppoſe a paſſage of ſeven feet wide, for the more convenient acceſs to the ſheep, and the ſtalls that are to ſerve for the other beaſts.

On this diviſion of the *lower floor* of the Ark, there will remain four other areas (two on each ſide of the middle areas for the ſheep) each of them 18 feet wide, and 200 feet long, which will be more than ſufficient to contain the ſeveral beaſts which were to be preſerved for the propagating of their kind; for which, in the foregoing tables, there is allotted to the length of the ſtalls only 611 feet, beſides the largeneſs of the ſtalls allowed to each of them. So that upon this fair computation, there will be very near *two hundred feet overplus* in this lower ſtory, for the reception of any other beaſt not yet enumerated, or diſcovered.

The next thing to be cleared up, is the *capacity* of the *ſecond Story* for containing *a year's proviſion of food.* In order to which 'tis to be obſerved, that the ſeveral beaſts feeding on hay were before, upon a fair calculation, ſuppoſed equal to ninety-two *beeves:* but to prevent all kind of cavils which may be made at the proportioning of them, let them be as a 100, beſides the 1825 *ſheep* taken in for food. But now, becauſe theſe are to be devoured by five *per diem*, therefore the year's proviſion to be made for them is to be reckoned but as for half that number, *viz.* 912. Theſe being divided by ſeven, to bring them into proportion with the *beeves*, will amount to 180, which added to the former 100 make 280, ſuppoſe 300. So then, according to this ſuppoſition, there muſt be ſufficient proviſion of hay in the ſecond ſtory to ſuſtain 300 beeves for a whole year.

Now 'tis obſerved (ſaith *Buteo*) by *Columella*, who was very well verſed in the experiments of huſbandry, that thirty or forty pound of hay is ordinarily ſufficient for an *ox* for one day, reckoning twelve ounces in the pound. But we will ſuppoſe forty of our pounds. And 'tis aſſerted by *Buteo*, upon his own trial and experience, that a ſolid cubit of dry'd hay, compreſſed, as it uſes to be when it hath lain any conſiderable time in mows or ricks, doth weigh about forty pound; ſo that for 300 *beeves* for a whole year, there muſt be 109,500 ſuch cubits of hay, (i. e.) 365 multiplied by 300. Now the ſecond ſtory, being ten cubits high, 300 long, and fifty broad, muſt contain 150,000 ſolid cubits, which is more by 40,500 than what is neceſſary for ſo much compreſſed hay; and will allow ſpace enough both for any kind of beams and pillars neceſſary for the fabric, or likewiſe for other repoſitories, for ſuch fruits, roots, grain, or ſeeds, as may be proper for the nouriſhment of any of the other *animals*; and likewiſe for ſuch convenient paſſages and apertures in the floor, as might be neceſſary for the putting down of the hay to the ſtalls in the lower ſtory. From which it is manifeſt, that the ſecond ſtory was ſufficiently capacious of all thoſe things deſigned for it.

And then as for the *third ſtory*; there can be no colour of doubt, but that one half of it will be abundantly ſufficient for all the ſpecies of birds, together with food ſufficient for their ſuſtenance, becauſe they are generally but of ſmall bulk, and may eaſily be kept in ſeveral partitions, or cages, over one another. Nor is there any reaſon to queſtion, but that the other half would afford ſpace enough both for *Noah*'s family and Utenſils.

Upon the whole matter, it doth, of the two, appear more difficult to aſſign a ſufficient number and bulk of neceſſary things, to anſwer the capacity of the *ark*, rather than to find ſufficient room for thoſe ſeveral ſpecies of *animals* already known. But becauſe it may be reaſonably preſumed, that there are ſeveral other ſpecies of beaſts and birds, eſpecially in the undiſcovered parts of the world, beſides thoſe here enumerated, therefore it is but reaſonable to ſuppoſe the *ark* to be of a bigger capacity, than what may be ſufficient for the things already known; and upon this account it may be aſſerted, that if ſuch perſons, who are moſt expert in philoſophy and mathematicks, were now to aſſign the proportions of a veſſel that might be ſuitable to the ends here propoſed, they could not (all things conſidered) find out any more accommodate to theſe purpoſes, than thoſe here mentioned."

To the above obſervations, I may add, what is recorded by *Parker* in his *Bibliotheca Biblica*, vol. I. *Occaſ. Annot.* 13. that *Peter Janſen*, a *Dutch* merchant, about the beginning of the laſt century, cauſed a ſhip to be built for him, anſwering, in its reſpective Proportions, to thoſe of *Noah*'s ark, the length of it being 120 feet, the breadth of it 20, and the depth of it 12. At firſt, this was looked upon no better than a fanatical Viſion of this *Janſen* (who was by profeſſion a *Menoniſt*) and whilſt it was building, he and his ſhip were made the ſport of the ſeamen, as much as *Noah* and his ark could be. But afterwards, it was found, that ſhips, built in this faſhion, were, in the time of peace, beyond all others moſt commodious for commerce; becauſe they would hold a third part more, without requiring any more hands, and were found far better *runners* than any made before.

Page 26. l. 21.—As the opinion of the earth's containing within itſelf *an abyſs of water* is maintained by ſome of the *moſt antient Heathen* writers, and it doth not ſeem probable that they procured the knowledge of it by any diſcovery of their own, and therefore that they obtained it at firſt *from Revelation* by Tradition, I ſhall here annex their evidence as being, in this reſpect, *properly divine.*

PLATO in his *Phædon* (near the end) writeth thus, ‘Και ολην μεν δη την γην, &c. And ſuch is the form and conſtitution of the whole earth, and the things that are about it. There are ſeveral *circular Hollows* in its inſide, ſome deeper, ſome wider, ſome narrower, &c. But all the Cavities every where perforate one another, and are open at both ends, by means of which a great quantity of water flows from one into another, as into ciſterns. There are alſo under ground incredible large rivers, and perpetual ſprings of waters both hot and cold. But *One* of theſe concavities in the inſide of the earth is *greater* than the reſt, piercing from ſide to ſide through the whole Earth; which *Homer* mentions in this verſe. Iliad. Θ. v. 14.

Τηλε μαλ', ηχι βαθιϛον υπο χθονος εϛι βερεθρον.
Far hence, in th' Earth there gapes a Gulph immenſe.

‘Which both he elſewhere, and many other Poets, call *Tartarus*, into which all rivers have their con-

‘ fluence, and flow out of it again by turns. Each ‘ river comes out tinctured with the nature of the ‘ earth thro’ which it flows. And the reaſon why ‘ the rivers flow thither, and come back again, is, ‘ becauſe *the Abyſs* has neither bottom nor baſe; and ‘ therefore tho’ they are lifted up, they naturally flow ‘ down again: as alſo does the *Air* or *Spirit* that ‘ attends them. And as in the reſpiration of animals, ‘ there is an inceſſant ingreſs and egreſs of the air, ‘ ſo the air, that is mingled with the waters, accompanies them in their ingreſs and egreſs, and raiſes ‘ raging winds. When theſe waters fall into this ‘ *lower Abyſs*, they diffuſe themſelves into all channels ‘ of the ſprings and rivers, and fill them up; juſt ‘ as if one were drawing water up with two pails, one ‘ of which fills as the other empties: for theſe rivers ‘ flowing from thence fill up all our channels; from ‘ whence diffuſing themſelves about, they conſtitute ‘ *our Seas*, *Rivers*, *Lakes*, and *Fountains*.’

So *Heſiod*, *Theog*. l. 119.

Ταρταρα τ’ηεροεντα μυχω χθονος ευρυοδειης.
And dark Tartarus *in the* Earth’s receſs.

And again; *Homer*, *Iliad*. Φ. 195.

Ουδε βαθυρρειταο μεγα σθενος Ωκεανοιο,
Εξ ουπερ παντες ποταμοι ϗ πασα θαλασσα,
Και πασαι κρηναι ϗ φρειατα μακρα ναουσιν.

Nor great Oceanus, *from whoſe fountains flow*
All Seas, all Rivers, *and* all Springs below.

It is remarkable, that the moſt antient Heathen Authors often ſpeak of *Oceanus* [under which term they comprehended the immenſe body of water within the Earth, as well as that without] as *the Parent* of their Gods; as indeed He was; for the ſubſidence or retirement of the great Abyſs (at the end of the Deluge) to its original bed, the Boſom of the Earth, reſtored to them *the Lights of Heaven* (which they worſhipped as *Gods*) and the uſe of the *Earth*, ſee *Gen.* viii. 22.

So *Homer* (Iliad. Ξ. 200.) makes *Juno* ſpeak thus:

Ειμι γαρ οψομενη ϖολυφορβȣ ϖειρατα γαιης,
Ωκεανον τε, θεων γενεσιν, ϗ μητερα Τηθυν, &c.

Then ſhe—I haſte to thoſe remote *abodes,*
Where the Great Parents *of the deathleſs Gods,*
The rev'rend Ocean *and grey* Tethys *reign,*
On the laſt limits of the land and main:
I viſit theſe, to whoſe indulgent cares
I owe the nurſing of my tender years.

But more particularly *Orpheus* in his hymns writes thus, p. 178.

Ωκεανον καλεω ϖατερ' αφθιτον αιεν εοντα,
Αθανατων τε θεων γενεσιν θνητων τ' ανθρωπων,
Ος ϖερικυμαινει γαιης ϖεριτερμονα κυκλον.
Εξ ȣ ϖερ ϖαντες ϖοταμοι ϗ ϖασα θαλασσα,
Και χθονιοι γαιης ϖεγορρυτοι ικμαδες αγναι.

O Father Ocean! *'tis to thee I call,*
Of Gods *and* Men *the* GREAT ORIGINAL;
Thee I invoke! who with thy cloſe embrace
Surround'ſt the earth, the ſeat of human race;
From thee all Seas *and* Rivers *take their riſe,*
And Waters ſubterrene *receive ſupplies.*

And again, p. 114.

Κλυθι Ποσειδαον γαιηοχε ———
Ος ναιεις ποντοιο Βαθυστερνοιο θεμεθλα,
Ποντομεδων, αλιδουπε, βαρυκτυπε, εννοσιγαιε, &c.

I cannot better illuſtrate the meaning of ſome of theſe epithets given to *Oceanus* or *Neptune*, or ſhew how applicable they are to the point in hand, than in the words of Dr. *Woodward* (vid. *Nat. Hiſt. of the Earth*, p. 138.) ‘ Theſe Phœnomena are not new, or peculiar to the Earthquakes, which have happened in our times, but have been obſerved in *all ages*, and particularly theſe *exorbitant commotions* of the *Water* of the Globe. This we may learn abundantly from the hiſtories of former times; and it was for this reaſon that many of the antients concluded, rightly enough, that *they* were cauſed by the impulſes and fluctuation of water in the bowels of the Earth. And therefore they very frequently called *Neptune* Σεισιχθων, as alſo Ενοσιχθων, Ενοσιγαιος, and Τιναχτορογαιης; by all which Epithets they denoted his Power of *Shaking the Earth*. They ſuppoſed that he preſided over all water whatever, as well that within the Earth, as the Sea, and the reſt upon it; and that the Earth was ſupported by water, its foundations being laid thereon; upon which account it was that they beſtowed upon him the cognomen Γαιηοχος, or *Supporter of the Earth*, and that of Θεμελιουχος, or *the Suſtainer of its foundations.* They likewiſe believed that he, having a full ſway and command over the Water, had power to ſtill and compoſe it, as well as to move and diſturb it, and the Earth by means of it: and therefore they alſo gave him the name of Ασφαλιος, or the *Eſtabliſher*; under which name ſeveral temples were conſecrated to him, and Sacrifices offered, whenever an Earth-

'quake happened, to pacify, and appeaſe him; re-
'queſting that he would allay the commotions of the
'water, ſecure the foundations of the earth, and put
'an end to the Earthquake.'

Besides all this, *Lucretius* (*Lib.* v. 261.) argues thus:

Quod ſupereſt, humore novo mare, flumina, fontes
Semper abundare, *et latices manare* perennes,
Nil opus eſt verbis, magnus decurſus *aquarum*
Undique *declarat: ſed primum quicquid aquaï*
Tollitur, in ſummaque fit, ut nihil humor abundet.
Partim quod validi verrentes æquora venti
Diminuunt, radiiſque retexens ætherius Sol:
Partim quod ſubter per terras diditur omnes.
Percolatur enim virus, retroque remanat
Materies humoris, *et* ad caput amnibus omnis
Convenit; *inde* ſuper terras *fluit agmine dulci*,
Qua via ſecta ſemel liquido pede detulit undas.

Beſides; that *Seas*, that *rivers* waſte and die,
And ſtill *increaſe* by conſtant *new* ſupply,
What need of proofs? this ſtreams themſelves do [ſhow,
As all run murm'ring to the *Sea below.*
But leſt the maſs of waters prove too great,
The Sun drinks ſome, to quench his natural heat;
And ſome the winds bruſh off, with wanton play
They dip their wings, and bear ſome parts away:
Some paſſes *thro' the earth, diffus'd all o'er*,
And leaves its ſalt behind at every pore;
For all *return* thro' *ſecret channels* ſpread,
And join, where *firſt they* iſſu'd from their bed;
Hence on the earth in fair mæanders play,
And thro' the vallies cut their liquid way.

Creech.

Of *Chriſtian* writers that have mentioned the *Abyſs*, I ſhall only inſert the opinion of *John de la Hay*, as his deſcription is very juſt, and contains a comment on the words under conſideration, viz. *And the fountains of the great Deep were broken up. Facilior erit horum verborum intelligentia*, &c. i. e. 'We ſhall 'more readily underſtand theſe Words, if we inquire 'into the meaning of the word *Abyſs* or *Deep*, which 'is nothing elſe than an hidden place in the Bowels 'of the Earth, where the Waters lie hid, and from 'whence Fountains and Lakes have their riſe; and 'it is called the *Great Deep*, by way of diſtinction 'from ſome leſſer Hollows in the Earth; for this is, 'as it were, the Mother of them all, to whom they 'are all joined by Veins and Paſſages: the Fountains 'therefore of that *Great Abyſs* were broken up, is, 'as if he had ſaid, ſuch a Quantity of Water burſt 'from that Great Deep, that its common Outlets 'were broke or burſt open, like a Land-flood, when 'it meets with Reſiſtance; the too great quantity of 'water breaks down the Channels and Banks, which 'as it were, impriſoned it: but not only the Fountains of that Deep were broken open, but the Sea 'came out of its bounds, pouring over the Earth, 'and the Rivers burſt forth with the greateſt violence.'

Such then, according to Scripture and Heathen Teſtimony, is the Conſtitution of the Earth, that it contains within itſelf an immenſe reſervoir of water, denominated by the name of the Great Deep; the *fountains of which were broken up*, in order to effect the *Deluge* in the time of *Noah*.

But before I can ſhew *particularly* how this great Event was brought to paſs—what alterations were made in the terraqueous Globe at that time—the Agents that were employed—and the manner of their acting—it will be proper to ſay ſomething of the *original formation* of the *Earth* ; which is thus deſcribed by *Moſes.*

GEN. i. 1. *In the beginning* [BeRASIT, in the firſt place[b]] *God created* [gave exiſtence to] AT, [the Atoms, the Subſtance of] *the Heavens* [VAT] *and* [the Subſtance of] *the Earth.*

And the Earth was without form [a formleſs maſs ; the parts for Solids and Fluids being confuſedly mixt together] *and void*, [empty, hollow within.]

And Darkneſs [dark, torpid Air] *was upon the face of the* Deep.

And the Spirit of God [RUE ALEIM] *moved upon the face of the Waters.* This is the *firſt Agent* or *Mover* mentioned to have been employed towards reducing

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[b] Which eaſy and natural interpretation of the word BeRASIT frees the Scripture from an impertinent queſtion that ſome have put here, viz. *In the beginning of what ?* As if *Moſes* had repreſented God as having *created the World in the beginning of the World*, or in the *beginning of Time* (which is the ſame thing, for *Time began* with the *World*) which would have been an idle tautology. But to tell us, that the *firſt act* that was done in the *Hiſtory* that he was going to give of *the Generations of the Heavens, and of the Earth, and of Mankind*, (*Gen.* ii. 4—8.) was the *production of the world de novo*, or that *the Aleim*, his God, *created* it, is not only ſenſe, but highly proper, as it ſtruck at the *very root* of the *Idolatry* then prevailing in the world, which was the *worſhipping of the creature inſtead of the Creator*, or the works of God, inſtead of God himſelf. So that as *J. Neirenberg* ſays. "*In uno duntaxat capite, primo Geneſeos, puto plus docuiſſe Moyſem quam cæteros omnes philoſophos, et naturæ interpretes* ;" i. e, *I think that Moſes has taught us more philoſophy in one ſingle chapter*—viz, *the firſt of Geneſis, than all the philoſophers and explainers of nature put together.* So I may ſay, that *Moſes* has taught us more *theology* in one ſingle verſe of that chapter, than all the heathen world could have diſcovered by any means of their own.

the *formleſs* maſs of the Earth into *ſhape*. What *this Spirit* is, may be judged of from ſimilar paſſages in Scripture, *&c. &c.*

Page 30. l. 30.—THUS would the *inward* Expanſe [denoted by A. 2. in plate I.] or expanding air act *upwards* every way from the center to the circumference of the chaotic mixture; while the *outward* Expanſe [A 1.] or the light and ſpirit on the *outſide* of this globe would act *downwards*, on, and through every part of it. And by theſe two equal and counter-acting agents, the *earthy*, or *ſolid parts* of the chaotic maſs, would be driven together into a *ſpherical ſhell* [C,] at a conſiderable diſtance from the center of the earth, and there be ſuſtained; and as the earthy or ſolid parts would be driven together into a cloſe hard ſhell or cruſt, ſo by the ſame action would the *fluids* be permitted to ſlip between on *each* ſide of this cruſt. Thus would the *ſhell* of ſtone, or *the Earth*, be formed between *two orbs* of *water*; one orb [B. 1.] would cover the *outward* ſurface; the other [B. 2.] would cover, or by the force of the expanding air from the center be preſſed cloſe to, the *inward* ſurface of the earth. Such being the ſituation of things, it will now be apparent to every one, how the earth was *founded upon* and formed *between* the *waters*.—And as the ſhell, or cruſt of the earth, was driven together by the *expanſive* power of the air, and formed between two orbs of water, ſo the *Firmament* acted the part it was commanded *of dividing the waters from the waters.*

Page 42. l. 3. of the *Note*.—So in *Iſaiah*'s deſcription of the final deſtruction of the Earth, ch. xxiv. 18. *For the Windows from on high are open, and the foundations of the earth do ſhake. The earth is utterly broken down, the earth is clean diſſolved, the earth is moved ex-*

ceedingly. The earth ſhall reel to and fro like a drunkard, and ſhall be removed like a cottage, and the tranſgreſſion thereof ſhall be heavy upon it, and it ſhall fall, and not riſe again. From this laſt particular it is evident, that the *final* diſſolution of the earth is here intended, which we are told by St. *Peter*, Ep. ii. chap. iii. 10. will be effected by *Fire*, and in the manner following; *The Heavens ſhall paſs away with a great noiſe, and the elements ſhall melt with fervent heat, the earth alſo, and the works that are therein, ſhall be burnt up.* From whence it is plain, that this conflagration will begin in the *heavens above*, when the heavens themſelves will, in a manner, be *opened*, *cleft*, and *divided*, and ſtreams of fire be poured down upon the earth, as was the caſe in the deſtruction of *Sodom* and *Gomorrah*; or elſe the Lightnings of GOD's wrath will be darted from *the clouds* that are *on high*, as from concealed *lurking-holes*, till the whole be conſumed.

Page 44. l. 23.—I MAY here add (as I have done already with reſpect to the *notion of an Abyſs of Water within the earth*, and for the ſame reaſon,) the teſtimonies of ſome Heathen writers, and others, who, in their accounts of the deluge, have expreſsly mentioned *the diſſolution of the ſolid body of the Earth* at that time.

Manilius (who, according to *Scaliger*, lived in the time of *Auguſtus*) deſcribes the *diſſolution of the Earth* in the following terms; *(Aſtronom. Lib.* 4. *v.* 828.)

> *Concutitur Tellus validis compagibus hærens,*
> *Subducitque ſolum pedibus*; natat Orbis in ipſo;
> *Et vomit Oceanus Pontum, ſitienſque reſorbet,*
> *Nec ſeſe ipſe capit. Sic quondam merſerat Urbes,*
> *Humani Generis quum ſolus conſtitit Hæres*
> *Deucalion.* ———

The Earth now ſhakes, before tho' firmly bound,
And from their feet withdraws the treacherous ground.
The *melted Globe ſwims in itſelf*: the main
Spews up a Sea, and ſucks it in again;
Nor can the *great Abyſs* itſelf contain.
All nature thus was in confuſion hurl'd,
And *the Deep gorg'd itſelf with all the World.*
Deucalion only then remain'd behind
The Solitary Heir of all mankind.

Thus alſo *Virgil*, *Æneid. Lib.* xii. *v.* 204.

——— *Non ſi* tellurem effundat in undas
Diluvio *miſcens:* ———

Not tho' great *Jove* ſhould once again *diſſolve*
The Earth to Water, by a *Deluge* torn.

THE Phraſe *tellurem effundere in undas*, may be thought by ſome to have been uſed by the Poet for the ſake of the verſe, under the figure *Hypallage*; but as this effect was *really* produced at the time of the deluge, I ſee no reaſon for this ſuppoſition. Certain it is, that *Seneca*, in the account that he gives of his Deluge, ſuppoſes the *Earth* or the *Land* capable of *ſuch a diſſolution. Queſt. Nat. lib.* iii. *c.* 27.

'*Solutis quippe radicibus, arbuſta procumbunt & vitis,* '*atque omne virgultum non tenetur* ſolo, *quod* molle 'fluidumque *eſt:—Labant ac madent tecta, & in imum* '*uſque receptis aquis fundamenta deſidunt, ac tota humus* '*ſtagnat, fruſtra titubantium fulcra tentantur. Omne* '*enim fundamentum* in lubrico *figitur, & lutoſa humo* '*nihil ſtabile eſt.*' *i. e.* 'Their Roots being looſened the Trees and the Vine fall, and no Shrub whatever maintains its ſituation in the Soil, which is *now ſoft* and *fluid.*—The buildings fall, and are overflowed, and the waters making their way to the deepeſt receſſes, the foundations ſink, and the whole ground becomes a Bog. In vain are props applied to things in ſuch a tottering ſituation. For every foundation is in a ſliding ſtate, and there can be no firmneſs in ground ſo quaggy.’ And then he goes on to deſcribe the effects of the deluge throughout the whole earth, and concludes the Chapter thus: *Scies quid deceat, ſi cogitaveris orbem terrarum natare. i. e.* ‘If you would have a right Opinion of theſe things, you muſt ſuppoſe the *whole Earth* to *ſwim.*’ And ſpeaking of the ſame deluge in Chap. 29. ‘*Maximam tamen cauſam, ad ſe inundandam, terra ipſa præſtabit: quam diximus eſſe* mutabilem, & ſolvi in humorem.’ *i. e.* ‘The Earth itſelf will afford the greateſt cauſe for its own inundation: which we ſaid before was *changeable* and *reducible into a fluid.—Undare ergo terra debet—Incipiet ergo putreſcere, dehinc laxata ire in humorem, & aſſidua tabe defluere.*’ *i. e.* ‘It is neceſſary that the Earth ſhould be as capable of *undulation* as *Water.*—It will therefore begin to *putrify*, and then paſs into a *fluid* itſelf; and by a *continual ſolution* be *abſolutely liquated.*’ And again, Chap. 30. ‘*Adjice nunc, quod immanes ſunt in abdito lacus, & multum maris conditi, multum fluminum per operta labentium. Undique ergo erunt cauſæ diluvio, cum aliæ aquæ ſubinfluunt terras, aliæ circumfluunt, quæ diu coercitæ vincent, & amnes amnibus jungent, paludibus ſtagna. Omnium tunc mare ora fontium implebit, & majore hiatu ſolvet. Quemadmodum corpora noſtra ad egeſtum venter exhaurit,* quemadmodum eunt in ſudorem vires; *ita* tellus liquefiet, *& aliis cauſis quieſcentibus, intra ſe, quo mergatur, inveniet.*’ *i. e.* ‘Add to

‘ this, that there are immenſe Lakes hidden from our ‘ eyes; great part of the Sea alſo lies concealed, and ‘ there are many Rivers which flow in ſecret. There ‘ will therefore be cauſes ſufficient for a Deluge on all ‘ ſides, ſince ſome Waters enter in under the earth, ‘ others ſurround it, which having been long re- ‘ ſtrained ſhall break out and overcome it, Rivers ‘ ſhall join with Rivers, and Lakes with Marſhes. ‘ Then the Sea ſhall fill the mouths of all Springs ‘ and Fountains, and looſen them to a great extent. ‘ As the belly in emptying itſelf *exhauſts our Bodies*, ‘ as our vital ſtrength *turns into Sweat*, ſo the *Earth* ‘ ſhall *diſſolve*, and without the aſſiſtance of other ‘ cauſes, ſhall *find within itſelf* what ſhall *drown* it.’

AGREEABLY to this Deſcription of the matter, *Lucian*, or the *Author of the Book de Dea Syria*, in the account he gives of the *deluge*, ſays, Παντα υδωρ εγενοντο, *i. e. All things are become Water.*

So the *Pſeudo-Sibyll*,

Υδωρ εϛαι απαντα, ϗ̀ υδασι ϖαντ᾽ απολειται.

Water is all, and all Things are deſtroyed by Water.

Lycophron writes thus:

Οτ᾽ ημαθυνε ϖασαν ομβρησας χθονα,
Ζηνος καχλαζων νασμος.———

When Jove, *in Tempeſts raging, ſtorm'd the Earth,*
He daſh'd the Whole into minuteſt Parts.———

‘ WHERE the Scholiaſt, *Iſ. Tzetzes*, expounds ‘ ημαθυνε by αμμον εποιησε, κατεκλυσε: and that very ‘ properly, ſince all *Stone* was reduced into *Sand*, and ‘ the *hardeſt* Bodies in the Earth into *ſoft* and *tender*

‘ So that at the deluge, in ſuch State of Things, as
‘ *Nonnus*, in his *Dionyſiaca* (*Lib.* vi.) well obſerves,

——— Κοσμος ακοσμος εγενετο. ———

‘ *The World was unmade*, or *taken to pieces*[c].’

Philo-Judæus, ſpeaking of the Deluge (*Liber de Abrahamo*, p. 279.) ſays, Τα μερη του παντος εις μιαν φυσιν της υδατος αναστοιχειουμενα. That *the Particles of every thing were changed into the Nature of Water*.

Page 45. l. ult.—ANOTHER objection to the *total diſſolution of the* earth during the *Deluge*, has been drawn from the *Moſaic* deſcription of the ſituation of *Eden*, and the *names* of the *lands* and *rivers* adjacent thereto (*Gen.* ii. 10, &c.) as exiſting under *thoſe appellations* in the time of *Moſes*. Now it has been argued, that if ſuch Countries and Rivers, and ſo called, exiſted in *Moſes*'s time, as did ſoon after the Creation of the World, then this part of the World was *not deſtroyed* during the deluge. But why there might not have been *Lands* and *Rivers* ſimilarly ſituated, and called after the ſame Names *after* the Deluge, as they were before, I ſee no reaſon, or rather great reaſon, why all ſuch things ſhould be alike. For, certain it is (as I have amply ſhewn above) that the *ſame Agents* were employed in the Reformation of the earth *after* the deluge, as were concerned in the *firſt* formation of it, and alſo that they acted in *the ſame manner*, and under *the ſame direction*, and therefore may reaſonably be ſuppoſed to have produced *the ſame Effect*. So that the Earth, with regard to the *diſpoſition* of *Land* and *Water*, would be formed after the deluge, much as it was before, and of conſequence the ſituation of Countries, Rivers, *&c.* would be a-

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[c] Vid. WOODWARD's *Nat. Hiſt. of the Earth illuſtrated*, &c. p. 64.

like; and by the deſcendents of *Noah* (who were acquainted with their former ſituations) would be *called after the ſame Names.*

Page 46. l. 24.—*AND all fleſh died that moved upon the earth, both of fowl, and of cattle, and of beaſt, and of every creeping thing that creepeth upon the earth, and every man. All in whoſe noſtrils was the breath of life, of all that was in the dry land, died. And every living ſubſtance was deſtroyed, which was upon the face of the ground, both man, and cattle, and the creeping things, and the fowl of the heaven; and they were deſtroyed from the earth: and Noah only remained alive, and they that were with him in the ark.*

THIS deſtruction of the land animals for the ſin of man, may, at firſt ſight, ſeem to carry ſome reflection upon the wiſdom and goodneſs of GOD, as a tranſaction unneceſſary and unjuſt. But certain it is, that the Creator has full power to diſpoſe of his creatures as he ſees beſt; and however unaccountable the diſpenſation may appear to us, yet it will always be conſonant to the rules of Juſtice and Mercy. And in this caſe it is manifeſtly ſo. For as theſe creatures were made for the uſe and ſervice of man, ſo when man was, in a manner, to be deſtroyed, it was neceſſary that they ſhould periſh together with him, as being of no farther Service: And not only this; but had they been preſerved alive (which muſt have been by a moſt extraordinary miracle) they would have been ſo very numerous after the flood, in compariſon of the few human creatures, that they would have defeated the very end for which they were made, by overpowering and deſtroying the ſmall remnant of the human race. So that it was *neceſſary* and *proper* that they ſhould be deſtroyed, and begin again with man's re-beginning.

THE particular manner, in which the deſtruction of the brute creatures is notified, ſufficiently points out the *Species* that were to be deſtroyed, *viz.* the *land animals only*, as verſe 21. *All Fleſh died that* MOVED UPON THE EARTH—ALL *that* WAS IN THE DRY LAND, *died—every living ſubſtance was deſtroyed which* WAS UPON THE FACE OF THE GROUND, *both man, and cattle, and the creeping things, and the fowl of the heaven.* So that we may hence fairly conclude (eſpecially as *Noah* was ordered only, *Gen.* vii. 2, 3, to take pairs of the above ſpecies into the ark, *to keep ſeed alive upon the face of all the earth*) that the *fiſh*, or *the inhabitants of the waters* were preſerved alive, without a miracle, in their own proper element. For though the firſt ſhock, *when the fountains of the great abyſs were broken up*, was very terrible, and probably deſtroyed great numbers of them, yet as many might have been preſerved as deſtroyed, as is commonly the caſe in the moſt tempeſtuous motions of the ſea. And after this firſt ſhock, we are told, the whole proceſs was *gradual*, both the increaſe and the decreaſe of the waters, ſo that with regard to any danger ariſing from the agitations of the waters, they may well be ſuppoſed to have been preſerved. But it has been further urged, that if they could ſurvive theſe, yet the great mixture of terreſtrial particles, when the whole body of the earth was diſſolved in the waters, muſt have produced ſuch noxious qualities, that it was impoſſible they ſhould have out-lived this injury, even in their own element. In anſwer to this, it muſt be obſerved, that the earth was not totally diſſolved, or the mountains reduced to atoms, 'till the waters had riſen to a vaſt height above them (ſee p. 85.) So that there is no reaſon for ſuppoſing that the diſſolved parts of the earth reached to the ſurface of the waters; and even ſuppoſing that ſome part of them did, yet it is a well known obſervation, that in the moſt turbid mixture of earth and water, the earthy particles will ſoon begin to deſcend, and the ſurface become clear and limpid; and alſo, that in ſuch turbid waters, the fiſh naturally riſe to the top, which, in the caſe of the Deluge, would be the moſt advantageous ſituation poſſible for them, as the ſurface of the waters would abound with every thing ſuitable to their nouriſhment, as the carcaſſes of dead men and animals, and all ſorts of flying inſects; and the trunks of trees that ſwam upon the top would ſerve for the ſhelter of the Spawn and the Fry.

Page 51. l. 1.—*The waters returned from off the earth* CONTINUALLY, or as tranſlated in the margin, *in going and returning*, in flowing backwards and forwards, in fluctuating here and there; for as the Airs began to aſcend before the Waters began to deſcend, they would of courſe impede, and in part drive back the waters, and ſo cauſe a fluctuating or reverberating motion in them; and by this means alſo, the waters would be prevented from ruſhing down too faſt, and from tearing the ſhell of the earth too much. For had the apertures into the Abyſs been very large, and no impeding body to withſtand the deſcent of the waters, the ſurface of this earth would have been of a very different form than what it is now. For inſtead of the preſent *gentle riſings* and *fallings* of hill and dale (all which were made by the *gradual* retreat of the waters at the end of the Flood, as will appear in the proceſs of this Tract) the whole ſurface of the land would have exhibited the moſt frightful and tremendous aſpect of *inacceſſible Precipices*, *broken Rocks*, and *unfathomable Gulphs:* and the water that at preſent breaks out from Spring-heads on the tops and ſides of Mountains, inſtead of ſoftly gliding through the declining Vallies, would have broken in direct falls and cataracts over our heads: ſo much depended upon the *gradual* deſcent and *retreat* of the Waters. And an Author, who was well acquainted with the Subject I am writing on, ſays, ‘ The waters in their going down acted in the ſame ‘ manner as they did at the *firſt Formation*; they form- ‘ ed the Surface of the Earth (if one might uſe ſuch an ‘ expreſſion without offence) for *their own uſe*, and in ‘ doing that formed it *for our uſe*.’ *Hutchinſon's Moſes's Principia*, p. 106. And by this mutual and contrary action of the Air and Water, the body of the earth would not only be preſerved from being broken too much, but the *ſafety of the Ark* upon the face of the Waters eaſily accounted for, without having recourſe to a *Miracle*, as ſome have done. For how impetuous ſoever the deſcent of the Waters might otherwiſe have been, yet the counter-action of the aſcending air would certainly weaken its force; and however violent the effects of theſe two agents might have been upon the body of the earth, yet it muſt be remembered, that the *Ark went upon the face of the Waters*, and was at a vaſt diſtance from the Place *where* this action was: and at the ſurface of the Waters there might have been, in a manner, a calm, or but a gentle fluctuation; in the ſame manner as when Water is let out of a funnel, or the orifice of a large and deep Veſſel, there is but little motion or undulation at the Surface, however violent and turbulent the effects of the deſcending water, and aſcending air, might be at the bottom. And notwithſtanding, according to the preſent Tranſlation of the Bible, we are told, *God made a Wind to paſs over the Earth*; yet this Wind could not be a common Wind, or an horizontal motion of the Air, for that would have agitated the Waters more than before; and we are further told, the conſequence of this wind was, that the *Waters were aſſwaged*, or prevented from being riſen higher; a juſt and natural conſequence of the interpretation of the Words, as before given. Beſides, *Moſes*, in his deſcription of the Deluge, is very particular in his Account of the *gradual increaſe* and *decreaſe* of the Waters, which gradual operation would greatly tend to the preſervation of the Ark. So that (notwithſtanding all imaginary Storms and Tempeſts, and an improper introduction of the Deity) we may juſtly credit what follows,

VERSE 4. *And the Ark reſted (in the ſeventh Month, on the ſeventeenth Day of the Month) upon the Mountains of Ararat.*

[AND being ſettled there was ſafe from all *ſubſequent* perturbations and agitations of the Waters.]

THE truth of this memorable event is teſtified by *Chriſtian*, *Jewiſh*, and *Heathen Antiquity*, and by a Tradition at preſent remaining among the Inhabitants of the Country, as the reader may ſee at large, by conſulting the *Univerſal Hiſtory*, Vol. I. p. 239, &c.

Page 52. l. 3.—VERSE 13. *And it came to paſs in the ſix hundredth and firſt year, in the firſt month, the firſt day of the month, the waters were dried up from off the earth: and Noah removed the covering of the ark, and looked, and beheld* the Face of the ground *was* dry.

VERSE 14. *And in the ſecond month, on the ſeven and twentieth day of the month*, was the earth dried.

THIS verſe may ſeem a contradiction to the former: but it is not. The *drying up of the Waters* from *off the Face* of the *Ground* is one thing, and the *drying*, or *draining the body of the Earth* from the effects of the Deluge, till all the ſuperfluous waters had returned into the Abyſs, is another. The firſt would naturally precede the latter; and this latter might have been (as is here related) near *two Months* after the former.

Which by the by (eſpecially if we include the time from the *firſt appearance* of the *Mountains*, which was two Months before this) ſhews, that there was time ſufficient, in a natural way, allowed for the production of *graſs* and *herbage* over the *face of the Earth*, for the nouriſhment of the animals that ſhould come out of the Ark.

Page 78. l. 30. (as a *Note.*)—There is mention indeed made, *Joſhua* x. 13. *of the Book of* JASHER, and of the miracle of *the Sun's ſtanding ſtill upon Gibeon, and the Moon in the Valley of Ajalon*, being recorded in it;——*Is not this written in the Book of Jaſher?* And as this event happened ſoon after the death of *Moſes*, ſome have imagined that the author of it muſt have been at leaſt coeval with *Moſes*, and that the Book of *Jaſher* muſt have been of great authority, as the Scripture itſelf refers to it for evidence. But, in ſhort, if we conſult the *original*, or even our *marginal verſion*, there will be no doubt of the author of the Book; for what is tranſlated, *Is not this written in the Book of* JASHER? is juſtly rendered in the *margin* of our Bibles, *Is not this written in the book of the* UPRIGHT? i. e. *in the word of God*, in the *true authentic Copy*, preſerved in the Tbernacle, and acknowledged by all the nation.

AND had the Tranſlators rendered the words for *Sun* and *Moon* in the above paſſage, according to the ſenſe of the original, and according to common ſenſe, the *light of the Sun*, and the *light of the Moon* (as the words really mean) the charge of falſe philoſophy could not have been brought againſt Scripture. But we firſt of all make miſtakes ourſelves, and then wonder how they came to be in the word of God. Mr. *Pike* in his *Philoſophia Sacra*, p. 44, &c. has undeniably ſhewn, that the words שמש and ירח tranſlated *Sun* and *Moon*, really mean, in *every place* of Scripture where they occur, the *ſolar light* and the *lunar light*, and not the *bodies* of the Sun and Moon. And with regard to the paſſage under conſideration, he obſerves thus; "I conceive that the chief of this miſtake ariſes from quoting the place *imperfectly*. 'Tis uſually ſaid thus,—Does not *Joſhua* ſay, *Sun ſtand thou ſtill?* and the next words are generally dropp'd or forgotten: whereas it runs thus,—*Sun ſtand thou ſtill in* GIBEON, *and thou Moon in the Valley of* AJALON. Now I aſk, was the *body* of the Sun in *Gibeon*, or the *body* of the Moon in the Valley of *Ajalon?* Surely no: but the *light* proceeding from the Sun, and the *light* reflected from the Moon, were both *there*. *Joſhua* therefore plainly means not the *bodies*, but the *lights* of the Sun and Moon here." In the ſame ſenſe underſtand the word for *Sun* in *Pſalm* xix. and the whole will be *true philoſophy*.

Page 80. ult. (as a *Note*)—SOME have aſked, *Why did not* NOAH *convey down to poſterity a true account of the Deluge; as he was preſent at the beginning and ending of it, and ſaw the whole tranſaction; he was certainly a more proper Perſon than* MOSES, *who did not live 'till ſome hundred of years after the event?*

BUT ſuch objectors ſeem not to reflect on the ſituation of *Noah* during the flood, namely, that *he and all his family* were *ſhut up in the Ark*, and if they had been ſeated on the top of it, they could not have ſeen to any very great diſtance, at leaſt could never have known that the *whole globe* was *covered and environed with water:* neither could they have judged of the *amazing quantity of water ſent at that time from the abyſs beneath*; for though the water, in its paſſage upwards, would naturally elevate the ark to whatever height itſelf roſe, yet the perſons in it could not tell from whence it came, or to what height it aſcended: far leſs then cou'd they judge of tranſactions that paſſed at a *ſtill greater Depth* below them, namely, the *deſtruction*, *diſſolution*, and *re-conſolidation of the whole body* of the earth; all which were effected *beneath* the waters, inſcrutable to human eye, thought, or concluſion, unleſs enlightened by revelation: ſo that *Noah*, though preſent during the event of the Flood, was as ignorant (conſidering his then ſituation in a natural light) of theſe great tranſactions, as any of us at preſent can be, nay more ſo, for our Opportunities of ſearching and examining the Earth, and making deductions therefrom, are greater than his could be, and therefore he could not convey to us that knowledge which himſelf had not, unleſs he was informed of it *by Revelation*, which indeed he was, as I have proved already. And if it were proper to give *Noah* by ſupernatural means, any information of theſe things for his own and his family's ſake, certainly it was far more requiſite that *Moſes* ſhould be acquainted with them, who was to convey the *knowledge of theſe things*, and alſo ſome *far more uſeful truths, to all Poſterity*. DEUT. xxix. 29.

Page 114. l. 13.—THE obſervations of the ingenious DR. *Derham*, in his *Phyſico-Theology* (Book II. chap. v.) on this Head, are well worth reciting; "That ſprings have their origin from the ſea [or *ſubterranean waters*, in the ſenſe Dr. *Plot* underſtands it, in his *Tentamen Philoſ. de origine Fontium*, § 51. as Dr. *Derham* refers to that book for a farther diſcuſſion of the ſubject] and not from rain and vapours, among many other ſtrong reaſons, I conclude from the *perennity* of divers ſprings, which always afford the ſame quantity of water. Of this ſort there are many to be found every where, [as may be ſeen in the above mentioned Treatiſe of Dr. *Plot.*] But I ſhall, for an inſtance, ſingle out one in the pariſh of *Upminſter*, where I live, as being very proper for my purpoſe, and one that I have had better opportunities of making remarks upon *above twenty years.* This in the greateſt droughts is little, if at all diminiſhed, that I could perceive by my eye, although the ponds all over the country, and an adjoining brook, have been dry for *many months* together; as particularly in the dry ſummer months of the year 1705. And in the wetteſt ſeaſons, ſuch as the ſummer and other months were preceding the violent ſtorm in *November*, 1703. (vid. *Philoſ. Tranſ.* No. 289.) I ſay, in ſuch wet ſeaſons I have not obſerved any increment of its ſtream, excepting only for violent rains falling therein, or running down from the higher lands into it, which diſcoloureth the waters oftentimes, and makes an increaſe of only a day's, or ſometimes but a few an hour's continuance. But now, if this ſpring had its origin from rain and vapours, there would be an increaſe and decreaſe of the one, as there ſhould happen to be of the other: as actually it is in *ſuch temporary* [d] ſprings, as have undoubtedly their ſource from rain and vapours."

"But beſides this, another conſiderable thing in this *Upminſter* ſpring (and thouſands of others) is, that it breaks out of ſo inconſiderable an hillock or eminence of ground, that can have no more influence in the condenſation of the vapours or ſtopping the clouds

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[d] Of this kind was the *Spring* or *Water* that ſupplied the Brook *Cherith*, mentioned 1 *Kings* xvii. 7. which at the *beginning* of a *great drought* (conſequent of a prophecy of *Elijah*, that *there ſhould be neither dew nor rain for ſome years*) was dried up; *And it came to paſs after a while, that the Brook dried up, becauſe there had been no rain in the land.* But all this time there were *other Springs* and *Fountains*, as appears from what is ſaid, 1 *Kings* xviii. 5.

pp. 33 - 48 wanting
" 49 - 64 dup.

Page 275. l. ult. And this conſideration, that *the gravity of bodies* was *leſs* during the flood than before or ſince, will ſerve to remove another difficulty which hath been thought to attend the Affair of the Deluge, viz. *How it came to paſs that ſhells, and corals, eſpecially ſuch as are called* pelagiæ, *or thoſe that live and grow only at the bottoms of the deepeſt ſeas, ſhould be now found upon the tops and in the bodies of the higheſt mountains, even ſuch as are at the greateſt diſtance from any ſea; whereas if the ocean itſelf were to be emptied out upon the earth, it would never carry* theſe heavy bodies *with it to ſo great a diſtance.*

In anſwer to which objection I would firſt obſerve, as proved above, that the *gravities of bodies* were certainly *leſs* during the flood than ſince; which is moreover evident from the manner in which theſe bodies lye in the ſtrata; it being not uncommon to find one particular ſpecies of ſhells or corals, or even a row of ſingle ſhells, running parallel, or keeping the ſame depth with the ſtratum in which they are found throughout the extent of a whole country, or as far as the ſtratum itſelf continues; which is a plain proof that theſe ſhells ſettled together with the diſſolved parts of the ſtratum; and of conſequence were before ſo light as to be buoyed together with that in the ſame medium.

And with reſpect to the conveyance of theſe bodies from their original beds to the places where they are now found, it muſt be remembered, that not only the ocean, but the Abyſs itſelf was emptied out upon the ſurface of the earth: and as the Abyſs lies *beneath* the ocean, and came out through the apertures in the bottom of That, in order to cover the earth, it would neceſſarily bring along with it all ſuch bodies as lay looſe near thoſe apertures, and were buoyable in water, and carry them to the greateſt diſtance itſelf was carried.

And what would farther tend to the more eaſy conveyance of theſe bodies would be, that as there was a *central nucleus* or a globe of looſe terreſtrial matter at the center of the primitive earth (as is evident from the *Moſaic* deſcription of the formation of that earth, p. 64, &c.[e]) and as this globe conſiſted of nothing but lax incoherent matter, ſo, as the waters came out of the Abyſs, and the air occupied it's place, this globe would naturally be broken to pieces; and the Parts thereof being diſſeminated through the water, and coming up along with it through the apertures of the ſeas, would drive away before it all looſe bodies, ſuch as ſhells, corals, bones, &c. that lay near thoſe apertures, and alſo whatever land-productions that were of a light nature it might accidentally meet with in its paſſage, and ſcatter them over the whole face of the earth.

[e] Beſides, we are expreſsly told, *Gen.* i. 10. That there were *Seas* in the ante-diluvian earth; there were alſo *Rivers* (*Gen.* ii. 10.) and *Mountains* (*Gen.* vii. 20.) and of conſequence *Vallies*, which are only the intervals between mountains, and without which mountains cannot be. The Truth of which repreſentation is alſo ſufficiently evidenced by the *remains* of the *products* of the *ante-diluvian earth* now found buried in this. There are *foſſil ſhells*, the fiſh of which live and grow only in the *ſea*; there are other ſhells that could be found only in *river-water*; and there are *foſſil plants* now found that naturally grow only upon *mountains*; and others that germinate only in *vallies*. From whence it is very evident, that the *external form* of the ante-diluvian earth was much the ſame as the preſent, diverſified into ſeas, rivers, mountains, vallies, &c. and from what is ſaid page 23, &c. the ſeas, rivers, &c. were in the ſame ſituation, with regard to themſelves, in the one earth as in the other. Now if the *external form* of the two earths were alike, there is no reaſon to imagine that the *internal* was not; at leaſt with reſpect to the point in queſtion, the exiſtence of the *central nucleus*, which I have already ſhewn was no more than the Conſequence of the ſurface of the earth being torn and broken into hollows and channels for ſeas, rivers, vallies, &c. and the matter that before filled up theſe hollows being placed at the center.

So that it is no wonder that we find ſuch a ſtrange confuſion of things as ſea and land animals, corals, and corallines, of far diſtant places, lying in one and the ſame bed; and in particular that the *pelagiæ ſhells* ſhould be now found in the moſt inland parts; for as theſe ſhells lay at the bottom of the ſea, they would be ſubject and expoſed to the firſt and moſt violent irruption of the ſubterranean waters, and be carried by them over the face of the whole earth. And as it is well known (which has ſurprized many foſſiliſts) that we find a far greater number of ſhells of the *pelagiæ* kind than any other now buried in the earth, ſo it is hence evident that all recourſe to partial floods, or accidental inundations of particular ſeas (ſuppoſing ſuch to have been) can never ſolve theſe phænomena; and nothing but an irruption of the *ſubterranean waters*, and thorough waſhing and cleanſing of the *immenſe baſon* of the *ocean*, and the *bottoms* of *all the ſeas* by theſe waters, can account for theſe *extraordinary and extenſive effects*.

I MAY here juſt add that, notwithſtanding the ſea and all its various productions were thrown out upon the land, yet the land and its products were not thrown into the ſea: the earth was not diſſolved, till the waters had riſen to the higheſt and all was calm and quiet; ſo that the mineral and metallic parts of the globe, though reduced to their primogenial atoms, and vegetables and their ſeeds though floating in the waters, did not move far ſideways, but principally aſcended upwards and ſettled down again, in or near the ſame places from which they were before aſſumed. So that the waters, in their retreat into the Abyſs, would have much the ſame kind of earth to act upon at the end of the Deluge as they had at the beginning of the creation, and as they acted in both caſes in the ſame manner and under the ſame direction, the two earths would be alike.

But it has been farther aſked, *How came it to paſs, that the hardeſt rocks and the ſolid ſtrata of the earth ſhould be diſſolved, and yet ſuch tender ſubſtances, as ſhells, bones, teeth, and even plants, ſhould preſerve their texture and remain uninjured during the Deluge?*

In anſwer to which I would firſt obſerve, that the matter of fact is indiſputable, the former were diſſolved, and the latter were not; as the whole body of the earth proves to a demonſtration. The impreſſion of the moſt curiouſly engraved ſeal in wax cannot evidence the once liquid ſtate of the wax more than the exact delineation of the fibres of the moſt tender plant in ſtone proves the diſſolution of the ſtone: it is impoſſible that ſtone, unleſs it were ſoft and fluid, could receive the impreſſion of a plant, and impoſſible that the plant, unleſs it preſerved its form and texture entire, could give ſuch an impreſſion. And as theſe impreſſions are found in the hardeſt rocks and firmeſt ſtrata throughout the whole body of the earth, ſo the matter of fact is undeniable, and on this alone my arguments are founded. And therefore their force would not be invalidated if no other ſolution to this difficulty could be given. But I ſhall endeavour to proceed farther in the diſquiſition of this ſubject.

When indeed we view the immenſe ſtrata of the earth, or conſider the ſize and hardneſs of a ſingle rock, it appears ſcarce credible that that rock ſhould have been diſſolved and a tender plant preſerved entire in the inſide of it. And yet of this we have many ſimilar inſtances in the world. Certain it is that immenſe maſſes of ice frequently contain within them a vaſt variety of bodies, ſuch as ſhells, corals, bones, vegetables, &c. and the impreſſion of theſe bodies are as exquiſitely delineated in the ice, as the forms of the ſame bodies are frequently found to be in the hardeſt ſtone. Both ſubſtances, therefore, that include theſe bodies, were once in an *equal ſtate of fluidity*, and yet the *bodies included* in neither caſe *deſtroyed* nor *injured.* Now let us ſuppoſe the ice to be expoſed to the influence of the Sun's rays; in which caſe the action of the cold air, which had hardened and congealed the water, would be taken off, and the frozen maſs, by the penetration of the particles of light, be ſoon reduced to it's original element; and yet the bodies included would remain whole and entire.

To enlarge the reader's idea, let him caſt his eye over a map of the earth and view the frigid Zones, or thoſe immenſe tracts in the ocean which are frozen at times or throughout the whole year; and let him ſuppoſe the action of *light* to *prevail* there, how ſoon would the whole be reduced to *atoms* or *fluidity?* and yet the fineſt ſhell or moſt tender vegetable ſubſtance, even a leaf, would not be injured by *ſuch a diſſolution.* Now as ice is *harder* than plants, this is a plain inſtance that, according to the preſent courſe of nature, one and the ſame agent may diſſolve a hard and firm body, even of great extent and magnitude, without injuring thoſe that are ſmaller, of a finer and more delicate conſtruction. Nay, what may be thought more to the purpoſe, it is well known that, in caſe of lightning, the action of light will penetrate, tear aſunder, and diſſolve the parts of the hardeſt and moſt ſolid bodies, without injuring thoſe of a more ſoft and pliable texture, though it has had a free paſſage through them.

And ſuch alſo is the caſe of the *action* of the *air* upon different bodies. Such ſubſtances as naturally admit a free and eaſy paſſage to the air, will not be injured by the penetration of that Agent; whereas thoſe that reſiſt it's force, and the more they reſiſt, *i. e.* the ſtronger, firmer, and finer their conſtituent particles are, the more extenſive will the diſſolution be upon the ſeparation of their particles by the permeation of that Agent. And ſuch was the caſe at the time of the Deluge. In order that a way might be opened for the aſcent of the ſubterranean *water* over the ſurface of the earth, we are told, *Gen.* vii. 11. That *the fountains of the great Abyſs were broken up*, i. e. the ſides of thoſe *paſſages* or *cavities*, through which *ſprings* and *fountains* received their ſupplies in the ante-diluvian earth, were widen'd and thrown open upwards, and by this means the ſhell of the earth, *deſtroyed*, or broken and ſhattered in a vaſt number of places. But in order that the earth might be *diſſolved* (and the evidence both of the *deſtruction* and *diſſolution* remain to all future generations) we are told, *ver.* 11. (ſee p. 40. of the treatiſe) that *the paſſages of the airs were* alſo *opened*; *i. e.* the ſmaller cracks and crevices in the ſtrata of ſtone, &c. through which *air only* can paſs, were *opened* and diſtended, and the air paſſed freely through every pore and between every atom of ſtone, &c. and ſo the whole earth was really *diſſolved* or reduced to it's original, *fluid*, chaotic ſtate. That the air has a free paſſage through the cracks and pores of moſt ſorts of ſtone, no one will deny, and that it can paſs through all, and even the hardeſt of metals, is well known to thoſe who are acquainted with the nature of theſe bodies.— If for inſtance (to mention but one experiment, which may illuſtrate the ſubject I am upon in other reſpects) iron or copper be diſſolved by aqua fortis, a prodigious quantity of air-bubbles ariſe from the decompoſition of the metals, and if this experiment be performed under an exhauſted receiver, the appearance of the air-bubbles is greatly increaſed: and that this air was included in the pores of the metal, and ſet at liberty by the diſſolution of the metallic bodies, is evident from hence, becauſe aqua fortis by it's ſelf will yield no ſuch appearance under the air-pump. Now if we ſuppoſe the pores of all mineral and metallic bodies to be opened wider than they are naturally, and even ſo far, or extenſively, as that the air ſhould paſs freely between every atom of ſtone, &c. how would this in-jure or hurt the parts of a *plant* or *animal?* The air had a free and eaſy paſſage through them before, much freer than it had through any ſort of ſtone or metal; and therefore ſuch an execution as this againſt the *ſolid body* of the earth would not affect them; not to mention *they* were *not intended* to be in the *execution.*

Besides; the *texture* of plants and animals would greatly tend to their preſervation. It is well known that they conſiſt of *fibres* or *ſtringy parts,* which are complicated, twiſted and tied together; and theſe fibres conſtitute the ſides of veſſels or tubes, through which not only air but a much groſſer fluid [the ſap in vegetables, blood, &c. in animals] together with that paſs moſt freely. But the parts of ſtone have no ſuch tie or connection, or any ſuch eaſy, regular channels for the admiſſion and permiſſion of air: their conſtituent principles ſeem to be joined together only by a juxta-poſition or application of plane or ſpherical ſurfaces one to another: whereas the primogenial parts of plants and animals, by the ſtrict union and complicated toughneſs of theſe bodies, are in all probability linked together in a great variety of directions.

To all which conſiderations we may add that plants and animals are ſo ſmall and light in themſelves, and ſo eaſily ſuſceptible of motion any way, eſpecially when ſwimming in a fluid that could buoy them up (as was the caſe at the time of the deluge) that they would make no reſiſtance to the force of the agents (the *wind* and the *water)* that diſſolved the *ſolid* and *reſiſting* body of the earth, but would be readily driven, this way or that, as the currents of each conveyed them. So that though plants and animals, with regard to what we call the *Life* of them, would be *deſtroyed,* at leaſt thoſe that remained immerſed in the earth during the deluge, yet their parts would not be *diſſolved,* or their texture reduced to atoms; for the *ſmallneſs, poroſity, pliability,* and *toughneſs* of their parts would all conſpire towards preſerving them during the moſt violent effects of that cataſtrophe.

Page 279. l. 8.—CERTAIN then it is that this whole earth has been deſtroyed, all the ſolid ſtructure of it unhinged, broken to pieces, and reduced to it's original looſe chaotic ſtate, and afterwards formed anew into it's preſent ſolid, beautiful, and convenient ſhape. Effects theſe ſo great! that they could never have happened of themſelves, never have been the performance of blind inanimate matter. Matter cannot even deſtroy itſelf, much leſs, when deſtroyed, form itſelf anew. Theſe tranſactions therefore muſt have been effected by a Being ſuperior to all the Powers of Nature: and they carry in themſelves ſuch evident marks of *Wiſdom*, *Power*, *Goodneſs* and *Juſtice*, that they not only prove that there is a GOD, but that HE GOVERNS the World,—that *ſin* is his greateſt deteſtation, and *a life of faith* and *righteouſneſs* the only recommendation to his favour, *Heb.* xi. 7. *By faith Noah being warned of God of things not ſeen as yet, moved with fear, prepared an ark to the ſaving of his houſe; by the which he condemned the world, and became heir of the righteouſneſs which is by faith.*

THUS does the Book of Nature lead to the Book of GOD, and the one bears witneſs to the truth of the other, not only with reſpect to it's *philoſophy* but even it's *divinity*.

I COULD wiſh therefore that all ſearchers into nature, eſpecially thoſe who examine the ſubterranean kingdom, and are ſo anxious, and at ſo much pains, expence, and difficulty, to procure the productions thereof, would conſider *theſe two particulars*, and make a right uſe of their labours and ſtudies.

IT is at preſent too faſhionable a cuſtom with foſſiliſts to admire the external beauties of their curioſities, and to place them with great care and art in their cabinets, with no other view, than to exhibit them to he ignorant as a raree-ſhow. Poor amuſement to a ational mind! an employment quite unworthy the dignity of a philoſopher, who may draw ſo many and ſuch advantageous truths from his ſubterranean reſearches.

If the medaliſt can creep but half way to the time of the Deluge, and can prove from his collection the exiſtence of a *Cæſar* or *Alexander*, he thinks he riſes high in antiquity, and has made ſome noble diſcovery. But how vaſtly ſuperior to him is the foſſiliſt? I have fully ſhewn, that all the works of the artificers in *braſs*, *iron*, *ſtone*, &c. were *diſſolved* at the time of the Deluge, and that the knowledge of their arts were not recovered, or at leaſt in general applied, 'till long after the flood. So that the medaliſt muſt be content to make his obſervations upon things and impreſſions, that had not an exiſtence when the imprimatures of the ante-diluvian animal and vegetable bodies were formed in the ſolid rock all over the earth.

Neither do the *foſſil reliquiæ* of plants and animals by any means yield in elegancy and exactneſs to the medalic inſignatures; nay they far exceed them, for they exhibit not only the preciſe figure and due ſize, but the very bodies themſelves are moſt exquiſitely preſerved: whereas in medalic impreſſions the form is contracted and the likeneſs imagined.—"Theſe foſſil bodies then (ſays the author of *Spectacle de la Nature*, Vol. III. p. 415.) ſo ſeemingly uſeleſs, do ſpeak demonſtration to our ſenſes, and are a language which is underſtood by the moſt common capacities, having been appointed by Providence as ſo many ſtanding monuments of the moſt remarkable of all tranſactions, and are with regard to the *hiſtory* of *Moſes* the ſame as *medals* to the *Roman hiſtory*." *Voila* (ſays another *French* writer, *Hiſt. de l'Acad. Roy.* 1710. p. 28.) *des nouvelles eſpeces des medailles, dont les dates ſont & ſans* *comparaiſon plus anciennes, & plus importantes, & plus ſures, que celles des toutes les medailles Grecques & Romaines.*

AGAIN; certain it is that the works of GOD are contrived and executed by the utmoſt wiſdom, and for the moſt noble and uſeful purpoſes. And yet if we look into the earth, we ſhall ſee a ſtrange diſtribution of things, an appearance quite contrary to all order and regularity, propriety or utility. If we viſit the tops of the higheſt mountains, and examine the ſtate of things juſt under the turf, at leaſt in ſuch as are boggy and moraſſy, we ſhall find a vaſt variety of periſhed vegetables, of ſuch kinds or ſpecies as at preſent are not known (in their natural ſtate) to the inhabitants of the countries where they are diſcovered. If we examine the inſide of the earth, inſtead of finding things peculiar to the land or it's internal conſtitution, we ſhall there diſcover, even at the loweſt depths, *the ſpoils of the ocean* in great abundance, together with a vaſt variety of *animal* and *vegetable bodies* that can live and grow only upon the ſurface of the earth. And what is farther remarkable, in many places, only *parts* of theſe bodies, trunks of trees and leaves of plants without roots or branches, teeth of fiſhes without jaws, and bones without any bodies to ſupport them; and all theſe ſo cloſely fixed to and completely circumſcribed by the ſolid rock, as to ſhew that they could never have been of any uſe to any creature where they are found, neither could they ever have increaſed to complete forms. Then as for thoſe that are complete in their ſhapes, and carry evident marks of having been once *living creatures*, it is equally ſurprizing for what end or purpoſe they could be laid there, or why a ſet of beings, that invariably purſue the will of their Creator, or could not poſſibly offend him, ſhould be deſtroyed in ſuch amazing multitudes, that ſeveral whole ſpecies ſeem to have been buried alive in the earth.—

Theſe ſtrange, ſtriking phænomena certainly deſerve the notice and call for the examination, not only of the *philoſopher*, but even of the *divine*.

Now it is an allowed caſe that *nature*, i. e. the *Author of nature*, *does nothing in vain*. It therefore behoves the philoſopher to ſhew this, and to ſolve all appearances to the contrary. And, in the article under conſideration, it appears, I hope, from the foregoing treatiſe, that nothing but the ſuppoſition of the *univerſal Deluge* can anſwer theſe phænomena, and that That in every reſpect is equivalent to them; and therefore we may fairly conclude the reality of ſuch an event.

And with regard to *divinity*; it is a certain truth, that the *natural* world never ſuffered, unleſs the *ſpiritual* or *moral* had firſt offended. It cannot be ſuppoſed that God would fall out with ſenſeleſs inanimate matter, that operates mechanically, or puniſh the brute creation on their own account, that unvariably purſue the rules and inſtincts he has preſcribed them. If therefore either of theſe ſuffer, or the ſtate and condition of either be altered, at leaſt from better to worſe, it muſt be on account of that Being, for whoſe ſake they were at firſt made, and for whoſe welfare they are ſtill continued in exiſtence. And when they can be no longer of any ſervice to man (for whoſe uſe they were originally formed) it would be needleſs to preſerve them alive. If therefore man, or the whole ſpecies of the human race, except a few righteous, ſhould in ſuch a manner offend their Maker as to deſerve a total extirpation; it would be but requiſite that the brute creation ſhould periſh together with them, or at leaſt the far greater part of them, leſt at the renewal of the world the ſmall remnant of the human race ſhould be overcome by thoſe very creatures that were made for their benefit. And the *manner* in which they were deſtroyed, and the *diſtribution* of their bodies or bones after, indicate the *wiſdom* and *goodneſs* of that GOD, who *in judgment always remembers mercy*; for by burying of them in the earth, eſpecially in the *moſt ſolid* parts (which are of the greateſt ſervice to man, and therefore are daily dug and brought up to light) they are, and will remain, to each ſucceeding race of men as an evident proof of the truth of the deſtruction and of the wrath of GOD againſt a world of ſinners; ſo that *though dead* they ſtill *ſpeak* in the lively oracles of GOD and in the book of nature.

THE certainty that *this globe* has been deſtroyed *by a flood of water* may ſerve, not only as an argument againſt the *eternity* and *immutability of nature*, but alſo to convince us of another *ſcriptural* truth, that it will be deſtroyed *by fire*, 2 *Pet*. iii. 10. To an undiſcerning eye there are as few marks of *fire* in the earth, as there were of a *ſubterranean Abyſs of waters* to the ante-diluvian ſcoffers. And the general conflagration ſeems at preſent as incredible, and is as much ridiculed, as the Deluge was before it happened. And though GOD could conſume the whole world, if he pleaſed, by the blaſt of his mouth, yet he hath ſo conſtructed the earth, and ſtored it with ſuch combuſtible materials, as coal, ſulphur, bitumen, *&c.* as to afford us ſome kind of pre-ſignification of it's final-deſtruction by fire. And this event ſeemed ſo probable in the opinion of an heathen philoſopher, who had carefully examined the internal ſtructure of the earth, that *he wondered it had not come to paſs ages ago*; for *Pliny* in his ſecond book of *Nat. Hiſtory*, chap. cvi. cvii. after having given an account of ſome fiery mountains and other parts of the earth that are the ſeats and ſources of fire, makes this reflection: "Seeing, then, this element is ſo fruitful that it brings forth itſelf, and multiplies and increaſes from the leaſt ſparks, what are we to expect from ſo many fires already kindled on the earth? How does nature feed and ſatisfy ſo devouring an element, and ſuch a great voracity throughout all the world, without loſs or diminution of herſelf? Add to theſe fires we have mentioned the ſtars and the great ſun; then all the fires made for human uſes; fire in ſtones, in wood, in clouds, and in thunder. *So that it exceeds all miracles, that one day ſhould paſs without ſetting the whole world on fire; excedit profectò omnia miracula, nullum diem fuiſſe quo non cuncta conflagrarent.*"

But why need I mention *one* or *two* ſcripture philoſophical truths only, as verified by *the natural ſtate* of the earth? I have already ſhewn, that the *Moſaic account* of *the manner in which the whole earth was at firſt formed, together with the powers of the heavens or airs, and the manner in which it was deſtroyed and reformed at the time of the Deluge*, are philoſophically juſt and literally true: and therefore that the biblical philoſophy is ſtrictly conſiſtent with nature. And ſeveral reaſons may be given why it ought to be ſo.

Firſt, Becauſe when *Moſes* wrote, the *world* was *wholly given to idolatry*, and this idolatry conſiſted in the worſhip of the heavens, earth, *&c.*——*the ſun, the moon, and the ſtars, and all the hoſt of them*, and of no other god or gods (except the true) do we ever read throughout the Old Teſtament. Now the moſt likely and effectual way to deſtroy this idolatry would be, to *reveal a true ſyſtem of nature*—to declare that the heavens were *created* (and ſo not God)—to ſhew how, ſtep by ſtep they were *formed* into *a machine for the ſervice of man*; and therefore that man ought not to be ſubſervient or pay adoration to them; and to omit declaring this, would be to leave and encourage men in their idolatries: eſpecially, if any account of nature was given in the Bible; and as ſuch is undeniably laid down, principally, in the firſt chapter of *Geneſis*, that muſt undoubtedly be true.

Secondly, Beſides, was not the Bible written for *this* age, as well as thoſe in which the writers of it lived? Nay, was it not written *for*, and therefore is to continue *to*, *all* ages?—Did not the Spirit of truth (in whoſe ſight *a thouſand years are but as one day)* very well know, that certain ſelf-ſufficient mortals would riſe up (after his revelation was *delivered* and *ſealed*) contradict his word, diſpute his philoſophy, and preſume to give a ſyſtem of nature out of their own brains; when it was as much, or rather more impracticable for them to give the true one, than it would be for a man—who had never ſeen a watch, or any machine like it, and was utterly ignorant of the movements within—to account for the motion of the hand, in it's regular circuit, round the dial-plate? Did not the Spirit of truth, I ſay, know all this? And would not his goodneſs prompt him, and his veracity induce him, to reveal a true ſyſtem of nature; that thoſe who had humility to own that God alone could give an account of his works, and were willing to ſearch his word for that inſtruction, ſhould there find the ineſtimable treaſure? And as God has vouchſafed to to give an account, who will preſume to affirm that that account is untrue, or accommodated to the current, though falſe, opinions of the times?

Thirdly, "To ſuppoſe the Divine Being (ſays Mr. *Pike* in his *Philoſophia Sacra*, p. 12.) to conform himſelf in his word to bare outward appearances, or to the falſe apprehenſions of the vulgar, is ſuch a ſuppoſition as we will not admit in any other caſe. The alluſions and references of ſcripture to *hiſtory* or *geography* and the like we maintain to be juſt and exactly true, and look upon ourſelves as bound to believe and maintain the *hiſtory* as well as the *theology* of revelation; and why then ſhould we not for the ſame reaſon account ourſelves obliged to maintain, that there is no miſtake or miſrepreſentation in it's deſcriptions of and references to *natural things?*"

Fourthly, "There are many philoſophical paſſages, that cannot be regularly explained as conformed to outward appearance, or the opinions of men. Witneſs the *Moſaic* account of the creation and formation of all things. Can any one affirm that the firſt chapter of the Bible is built upon a falſe hypotheſis, or accommodated to vulgar apprehenſions? And if it be not true either in appearance, or in reality, I ſee not how it can be true in any reſpect."

Fifthly, "We muſt not ſuppoſe the word of God to ſpeak falſe in any caſe whatſoever. *It's hiſtory*, *it's chronology*, and *it's philoſophy* muſt be in fact as true as *it's theology*. If we ſuppoſe any part of the divine word to be erroneous, this ſo far ſhakes the authority of all the reſt. And as God knows all things perfectly, we muſt believe him the fitteſt to give us an account of his *works* as well as of his *nature*."

Sixthly, "There is a *neceſſary connection* between the knowledge of *natural* and *ſpiritual* things; ſince ſcripture conſtantly, or at leaſt very frequently, refers our thoughts to natural ideas, in order to illuſtrate ſpiritual truths. And for this reaſon it appears to be of ſome conſiderable importance, that the natural ideas referred to be ſtrictly juſt and true, in order to be a proper foundation for a right conception and repreſentation of divine matters."

Or, as Mr. *Spearman* (in his *Enquiry after Philoſophy and Theology*, p. 254.) has moſt judiciouſly ſtated this caſe: "When the ſenſes have acted upon any material natural object, what they take in and retain by that action is the *inward ſenſe* or *idea* of the thing; and the knowledge we gain by ſuch repeated acts of the ſenſes upon nature and her operations is *natural knowledge* or *phyſics*. When we make uſe of theſe natural and acquired ideas to help us to ideas of ſpiritual things, the knowledge we, by theſe means, gain of God and his operations is *ſuper-natural knowledge* or *metaphyſics*: and ſo by *things* that are *viſible* within the reach of our ſenſes, and *which we can underſtand*, we are led to the knowledge of *things which are inviſible*, without the reach of our ſenſes, and which we could not otherwiſe underſtand.[f] It is agreed, that we have no innate ideas; and that nothing can be in the underſtanding but what comes in by the ſenſes. We therefore either can have no ideas of God and ſpiritual things, or we muſt take them in by our ſenſes. But our ſenſes cannot act immediately upon ſpiritual objects, becauſe they are not the objects of our ſenſes; therefore we muſt have our ideas of ſpiritual and inviſible things from natural and viſible things. But natural and viſible things can give us no ideas of ſpiritual and inviſible things, unleſs they bear *ſome analogy* to them, are the *ſimulacra* or *images of them.* And if they be the images of them, they muſt have been *ſo created* and framed by God the Creator, and *to this very end*, and with *this very deſign:* for nothing could be created by infinite wiſdom but with foreknowledge and deſign. And ſince we find in the ſcriptures God and ſpiritual things repreſented to us under the ideas and names of viſible and ſenſible things, it is a demonſtration in itſelf that God framed them to repreſent himſelf, and what he preintended to reveal of himſelf and his ways to mankind."

So that we may well ſay with *Tully* from *Plato*, *Neceſſe eſt hunc mundum, quem cernimus, ſimulacrum eſſe æternum alicujus æterni. It cannot be but that this world, which is viſible to us, ſhould be a ſtanding typ or repreſentation of ſomething eternal.*

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[f] As *Rom.* i. 19. *That which may be known of God is manifeſt among men; for God* himſelf εφανερωσε *hath* ſhewed *it unto them.* [hath *manifeſted* it; for otherwiſe it could never have been known.] Γαρ, *For* [Inaſmuch as] *the inviſible things of him from the creatio of the world are clearly ſeen, being underſtood by the things that ar made,* [viſibles being made ſubſtitutes for inviſibles] *even hi eternal power and Godhead.*

Page 275. l. ult. And this conſideration, that *the gravity of bodies* was *leſs* during the flood than before or ſince, will ſerve to remove another difficulty which hath been thought to attend the Affair of the Deluge, viz. *How it came to paſs that ſhells, and corals, eſpecially ſuch as are called* pelagiæ, *or thoſe that live and grow only at the bottoms of the deepeſt ſeas, ſhould be now found upon the tops and in the bodies of the higheſt mountains, even ſuch as are at the greateſt diſtance from any ſea; whereas if the ocean itſelf were to be emptied out upon the earth, it would never carry* theſe heavy bodies *with it to ſo great a diſtance.*

In anſwer to which objection I would firſt obſerve, as proved above, that the *gravities of bodies* were certainly *leſs* during the flood than ſince; which is moreover evident from the manner in which theſe bodies lye in the ſtrata; it being not uncommon to find one particular ſpecies of ſhells or corals, or even a row of ſingle ſhells, running parallel, or keeping the ſame depth with the ſtratum in which they are found throughout the extent of a whole country, or as far as the ſtratum itſelf continues; which is a plain proof that theſe ſhells ſettled together with the diſſolved parts of the ſtratum; and of conſequence were before ſo light as to be buoyed together with that in the ſame medium.

And with reſpect to the conveyance of theſe bodies from their original beds to the places where they are now found, it muſt be remembered, that not only the ocean, but the Abyſs itſelf was emptied out upon the ſurface of the earth: and as the Abyſs lies *beneath* the ocean, and came out through the apertures in the bottom of That, in order to cover the earth, it would neceſſarily bring along with it all ſuch bodies as lay looſe near thoſe apertures, and were buoyable in water, and carry them to the greateſt diſtance itſelf was carried.

And what would farther tend to the more eaſy conveyance of theſe bodies would be, that as there was a *central nucleus* or a globe of looſe terreſtrial matter at the center of the primitive earth (as is evident from the *Moſaic* deſcription of the formation of that earth, p. 64, &c.[e]) and as this globe conſiſted of nothing but lax incoherent matter, ſo, as the waters came out of the Abyſs, and the air occupied it's place, this globe would naturally be broken to pieces; and the Parts thereof being diſſeminated through the water, and coming up along with it through the apertures of the ſeas, would drive away before it all looſe bodies, ſuch as ſhells, corals, bones, &c. that lay near thoſe apertures, and alſo whatever land-productions that were of a light nature it might accidentally meet with in its paſſage, and ſcatter them over the whole face of the earth.

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[e] Beſides, we are expreſsly told, *Gen.* i. 10. That there were *Seas* in the ante-diluvian earth; there were alſo *Rivers* (*Gen.* ii. 10.) and *Mountains* (*Gen.* vii. 20.) and of conſequence *Vallies*, which are only the intervals between mountains, and without which mountains cannot be. The Truth of which repreſentation is alſo ſufficiently evidenced by the *remains* of the *products* of the *ante-diluvian earth* now found buried in this. There are *foſſil ſhells*, the fiſh of which live and grow only in the *ſea*; there are other ſhells that could be found only in *river-water*; and there are *foſſil plants* now found that naturally grow only upon *mountains*; and others that germinate only in *vallies*. From whence it is very evident, that the *external form* of the antediluvian earth was much the ſame as the preſent, diverſified into ſeas, rivers, mountains, vallies, &c. and from what is ſaid page 23, &c. the ſeas, rivers, &c. were in the ſame ſituation, with regard to themſelves, in the one earth as in the other. Now if the *external form* of the two earths were alike, there is no reaſon to imagine that the *internal* was not; at leaſt with reſpect to the point in queſtion, the exiſtence of the *central nucleus*, which I have already ſhewn was no more than the Conſequence of the ſurface of the earth being torn and broken into hollows and channels for ſeas, rivers, vallies, &c. and the matter that before filled up theſe hollows being placed at the center.

So that it is no wonder that we find ſuch a ſtrange confuſion of things as ſea and land animals, corals, and corallines, of far diſtant places, lying in one and the ſame bed; and in particular that the *pelagiæ ſhells* ſhould be now found in the moſt inland parts; for as theſe ſhells lay at the bottom of the ſea, they would be ſubject and expoſed to the firſt and moſt violent irruption of the ſubterranean waters, and be carried by them over the face of the whole earth. And as it is well known (which has ſurprized many foſſiliſts) that we find a far greater number of ſhells of the *pelagiæ* kind than any other now buried in the earth, ſo it is hence evident that all recourſe to partial floods, or accidental inundations of particular ſeas (ſuppoſing ſuch to have been) can never ſolve theſe phænomena; and nothing but an irruption of the *ſubterranean waters*, and thorough waſhing and cleanſing of the *immenſe baſon* of the *ocean*, and the *bottoms* of *all the ſeas* by theſe waters, can account for theſe *extraordinary and extenſive effects*.

I MAY here juſt add that, notwithſtanding the ſea and all its various productions were thrown out upon the land, yet the land and its products were not thrown into the ſea: the earth was not diſſolved, till the waters had riſen to the higheſt and all was calm and quiet; ſo that the mineral and metallic parts of the globe, though reduced to their primogenial atoms, and vegetables and their ſeeds though floating in the waters, did not move far ſideways, but principally aſcended upwards and ſettled down again, in or near the ſame places from which they were before aſſumed. So that the waters, in their retreat into the Abyſs, would have much the ſame kind of earth to act upon at the end of the Deluge as they had at the beginning of the creation, and as they acted in both caſes in the ſame manner and under the ſame direction, the two earths would be alike.

But it has been farther aſked, *How came it to paſs, that the hardeſt rocks and the ſolid ſtrata of the earth ſhould be diſſolved, and yet ſuch tender ſubſtances, as ſhells, bones, teeth, and even plants, ſhould preſerve their texture and remain uninjured during the Deluge?*

In anſwer to which I would firſt obſerve, that the matter of fact is indiſputable, the former were diſſolved, and the latter were not; as the whole body of the earth proves to a demonſtration. The impreſſion of the moſt curiouſly engraved ſeal in wax cannot evidence the once liquid ſtate of the wax more than the exact delineation of the fibres of the moſt tender plant in ſtone proves the diſſolution of the ſtone: it is impoſſible that ſtone, unleſs it were ſoft and fluid, could receive the impreſſion of a plant, and impoſſible that the plant, unleſs it preſerved its form and texture entire, could give ſuch an impreſſion. And as theſe impreſſions are found in the hardeſt rocks and firmeſt ſtrata throughout the whole body of the earth, ſo the matter of fact is undeniable, and on this alone my arguments are founded. And therefore their force would not be invalidated if no other ſolution to this difficulty could be given. But I ſhall endeavour to proceed farther in the diſquiſition of this ſubject.

When indeed we view the immenſe ſtrata of the earth, or conſider the ſize and hardneſs of a ſingle rock, it appears ſcarce credible that that rock ſhould have been diſſolved and a tender plant preſerved entire in the inſide of it. And yet of this we have many ſimilar inſtances in the world. Certain it is that immenſe maſſes of ice frequently contain within them a vaſt variety of bodies, ſuch as ſhells, corals, bones, vegetables, &c. and the impreſſion of theſe bodies are as exquiſitely delineated in the ice, as the forms of the ſame bodies are frequently found to be in the hardeſt ſtone. Both ſubſtances, therefore, that include theſe bodies, were once in an *equal ſtate of fluidity*, and yet the *bodies included* in neither caſe *deſtroyed* nor *injured.* Now let us ſuppoſe the ice to be expoſed to the influence of the Sun's rays; in which caſe the action of the cold air, which had hardened and congealed the water, would be taken off, and the frozen maſs, by the penetration of the particles of light, be ſoon reduced to it's original element; and yet the bodies included would remain whole and entire.

To enlarge the reader's idea, let him caſt his eye over a map of the earth and view the frigid Zones, or thoſe immenſe tracts in the ocean which are frozen at times or throughout the whole year; and let him ſuppoſe the action of *light* to *prevail* there, how ſoon would the whole be reduced to *atoms* or *fluidity?* and yet the fineſt ſhell or moſt tender vegetable ſubſtance, even a leaf, would not be injured by *ſuch a diſſolution.* Now as ice is *harder* than plants, this is a plain inſtance that, according to the preſent courſe of nature, one and the ſame agent may diſſolve a hard and firm body, even of great extent and magnitude, without injuring thoſe that are ſmaller, of a finer and more delicate conſtruction. Nay, what may be thought more to the purpoſe, it is well known that, in caſe of lightning, the action of light will penetrate, tear aſunder, and diſſolve the parts of the hardeſt and moſt ſolid bodies, without injuring thoſe of a more ſoft and pliable texture, though it has had a free paſſage through them.

And ſuch alſo is the caſe of the *action* of the *air* upon different bodies. Such ſubſtances as naturally admit a free and eaſy paſſage to the air, will not be injured by the penetration of that Agent; whereas thoſe that reſiſt it's force, and the more they reſiſt, *i. e.* the ſtronger, firmer, and finer their conſtituent particles are, the more extenſive will the diſſolution be upon the ſeparation of their particles by the permeation of that Agent. And ſuch was the caſe at the time of the Deluge. In order that a way might be opened for the aſcent of the ſubterranean *water* over the ſurface of the earth, we are told, *Gen.* vii. 11. That *the fountains of the great Abyſs were broken up*, i. e. the ſides of thoſe *paſſages* or *cavities*, through which *ſprings* and *fountains* received their ſupplies in the ante-diluvian earth, were widen'd and thrown open upwards, and by this means the ſhell of the earth, *deſtroyed*, or broken and ſhattered in a vaſt number of places. But in order that the earth might be *diſſolved* (and the evidence both of the *deſtruction* and *diſſolution* remain to all future generations) we are told, *ver.* 11. (ſee p. 40. of the treatiſe) that *the paſſages of the airs were* alſo *opened*; *i. e.* the ſmaller cracks and crevices in the ſtrata of ſtone, &c. through which *air only* can paſs, were *opened* and diſtended, and the air paſſed freely through every pore and between every atom of ſtone, &c. and ſo the whole earth was really *diſſolved* or reduced to it's original, *fluid*, chaotic ſtate. That the air has a free paſſage through the cracks and pores of moſt ſorts of ſtone, no one will deny, and that it can paſs through all, and even the hardeſt of metals, is well known to thoſe who are acquainted with the nature of theſe bodies.—If for inſtance (to mention but one experiment, which may illuſtrate the ſubject I am upon in other reſpects) iron or copper be diſſolved by aqua fortis, a prodigious quantity of air-bubbles ariſe from the decompoſition of the metals, and if this experiment be performed under an exhauſted receiver, the appearance of the air-bubbles is greatly increaſed: and that this air was included in the pores of the metal, and ſet at liberty by the diſſolution of the metallic bodies, is evident from hence, becauſe aqua fortis by it's ſelf will yield no ſuch appearance under the air-pump. Now if we ſuppoſe the pores of all mineral and metallic bodies to be opened wider than they are naturally, and even ſo far, or extenſively, as that the air ſhould paſs freely between every atom of ſtone, &c. how would this in-jure or hurt the parts of a *plant* or *animal?* The air had a free and eaſy paſſage through them before, much freer than it had through any ſort of ſtone or metal; and therefore ſuch an execution as this againſt the *ſolid body* of the earth would not affect them; not to mention *they* were *not intended* to be in the *execution.*

Besides; the *texture* of plants and animals would greatly tend to their preſervation. It is well known that they conſiſt of *fibres* or *ſtringy parts*, which are complicated, twiſted and tied together; and theſe fibres conſtitute the ſides of veſſels or tubes, through which not only air but a much groſſer fluid [the ſap in vegetables, blood, &c. in animals] together with that paſs moſt freely. But the parts of ſtone have no ſuch tie or connection, or any ſuch eaſy, regular channels for the admiſſion and permiſſion of air: their conſtituent principles ſeem to be joined together only by a juxta-poſition or application of plane or ſpherical ſurfaces one to another: whereas the primogenial parts of plants and animals, by the ſtrict union and complicated toughneſs of theſe bodies, are in all probability linked together in a great variety of directions.

To all which conſiderations we may add that plants and animals are ſo ſmall and light in themſelves, and ſo eaſily ſuſceptible of motion any way, eſpecially when ſwimming in a fluid that could buoy them up (as was the caſe at the time of the deluge) that they would make no reſiſtance to the force of the agents (the *wind* and the *water)* that diſſolved the *ſolid* and *reſiſting* body of the earth, but would be readily driven, this way or that, as the currents of each conveyed them. So that though plants and animals, with regard to what we call the *Life* of them, would be *deſtroyed*, at leaſt thoſe that remained immerſed in the earth during the deluge, yet their parts would not be *diſſolved*, or their texture reduced to atoms; for the *ſmallneſs*, *poroſity*, *pliability*, and *toughneſs* of their parts would all conſpire towards preſerving them during the moſt violent effects of that cataſtrophe.

Page 279. l. 8.—CERTAIN then it is that this whole earth has been deſtroyed, all the ſolid ſtructure of it unhinged, broken to pieces, and reduced to it's original looſe chaotic ſtate, and afterwards formed anew into it's preſent ſolid, beautiful, and convenient ſhape. Effects theſe ſo great! that they could never have happened of themſelves, never have been the performance of blind inanimate matter. Matter cannot even deſtroy itſelf, much leſs, when deſtroyed, form itſelf anew. Theſe tranſactions therefore muſt have been effected by a Being ſuperior to all the Powers of Nature: and they carry in themſelves ſuch evident marks of *Wiſdom*, *Power*, *Goodneſs* and *Juſtice*, that they not only prove that there is a GOD, but that HE GOVERNS the World,—that *ſin* is his greateſt deteſtation, and *a life of faith* and *righteouſneſs* the only recommendation to his favour, *Heb.* xi. 7. *By faith Noah being warned of God of things not ſeen as yet, moved with fear, prepared an ark to the ſaving of his houſe; by the which he condemned the world, and became heir of the righteouſneſs which is by faith.*

THUS does the Book of Nature lead to the Book of GOD, and the one bears witneſs to the truth of the other, not only with reſpect to it's *philoſophy* but even it's *divinity*.

I COULD wiſh therefore that all ſearchers into nature, eſpecially thoſe who examine the ſubterranean kingdom, and are ſo anxious, and at ſo much pains, expence, and difficulty, to procure the productions thereof, would conſider *theſe two particulars*, and make a right uſe of their labours and ſtudies.

IT is at preſent too faſhionable a cuſtom with foſſiliſts to admire the external beauties of their curioſities, and to place them with great care and art in their cabinets, with no other view, than to exhibit them to the ignorant as a raree-ſhow. Poor amuſement to a rational mind! an employment quite unworthy the dignity of a philoſopher, who may draw ſo many and ſuch advantageous truths from his ſubterranean reſearches.

If the medaliſt can creep but half way to the time of the Deluge, and can prove from his collection the exiſtence of a *Cæſar* or *Alexander*, he thinks he riſes high in antiquity, and has made ſome noble diſcovery. But how vaſtly ſuperior to him is the foſſiliſt? I have fully ſhewn, that all the works of the artificers in *braſs*, *iron*, *ſtone*, &c. were *diſſolved* at the time of the Deluge, and that the knowledge of their arts were not recovered, or at leaſt in general applied, 'till long after the flood. So that the medaliſt muſt be content to make his obſervations upon things and impreſſions, that had not an exiſtence when the imprimatures of the ante-diluvian animal and vegetable bodies were formed in the ſolid rock all over the earth.

Neither do the *foſſil reliquiæ* of plants and animals by any means yield in elegancy and exactneſs to the medalic inſignatures; nay they far exceed them, for they exhibit not only the preciſe figure and due ſize, but the very bodies themſelves are moſt exquiſitely preſerved: whereas in medalic impreſſions the form is contracted and the likeneſs imagined.—"Theſe foſſil bodies then (ſays the author of *Spectacle de la Nature*, Vol. III. p. 415.) ſo ſeemingly uſeleſs, do ſpeak demonſtration to our ſenſes, and are a language which is underſtood by the moſt common capacities, having been appointed by Providence as ſo many ſtanding monuments of the moſt remarkable of all tranſactions, and are with regard to the *hiſtory* of *Moſes* the ſame as *medals* to the *Roman hiſtory*." *Voila* (ſays another *French* writer, *Hiſt. de l'Acad. Roy.* 1710. p. 28.) *des nouvelles eſpeces des medailles, dont les dates ſont & ſans* *comparaiſon plus anciennes, & plus importantes, & plus ſures, que celles des toutes les medailles Grecques & Romaines.*

Again; certain it is that the works of God are contrived and executed by the utmoſt wiſdom, and for the moſt noble and uſeful purpoſes. And yet if we look into the earth, we ſhall ſee a ſtrange diſtribution of things, an appearance quite contrary to all order and regularity, propriety or utility. If we viſit the tops of the higheſt mountains, and examine the ſtate of things juſt under the turf, at leaſt in ſuch as are boggy and moraſſy, we ſhall find a vaſt variety of periſhed vegetables, of ſuch kinds or ſpecies as at preſent are not known (in their natural ſtate) to the inhabitants of the countries where they are diſcovered. If we examine the inſide of the earth, inſtead of finding things peculiar to the land or it's internal conſtitution, we ſhall there diſcover, even at the loweſt depths, *the ſpoils of the ocean* in great abundance, together with a vaſt variety of *animal* and *vegetable bodies* that can live and grow only upon the ſurface of the earth. And what is farther remarkable, in many places, only *parts* of theſe bodies, trunks of trees and leaves of plants without roots or branches, teeth of fiſhes without jaws, and bones without any bodies to ſupport them; and all theſe ſo cloſely fixed to and completely circumſcribed by the ſolid rock, as to ſhew that they could never have been of any uſe to any creature where they are found, neither could they ever have increaſed to complete forms. Then as for thoſe that are complete in their ſhapes, and carry evident marks of having been once *living creatures*, it is equally ſurprizing for what end or purpoſe they could be laid there, or why a ſet of beings, that invariably purſue the will of their Creator, or could not poſſibly offend him, ſhould be deſtroyed in ſuch amazing multitudes, that ſeveral whole ſpecies ſeem to have been buried alive in the earth.—

Theſe ſtrange, ſtriking phænomena certainly deſerve the notice and call for the examination, not only of the *philoſopher*, but even of the *divine*.

Now it is an allowed caſe that *nature*, i. e. the *Author of nature*, *does nothing in vain*. It therefore behoves the philoſopher to ſhew this, and to ſolve all appearances to the contrary. And, in the article under conſideration, it appears, I hope, from the foregoing treatiſe, that nothing but the ſuppoſition of the *univerſal Deluge* can anſwer theſe phænomena, and that That in every reſpect is equivalent to them; and therefore we may fairly conclude the reality of ſuch an event.

And with regard to *divinity*; it is a certain truth, that the *natural* world never ſuffered, unleſs the *ſpiritual* or *moral* had firſt offended. It cannot be ſuppoſed that God would fall out with ſenſeleſs inanimate matter, that operates mechanically, or puniſh the brute creation on their own account, that unvariably purſue the rules and inſtincts he has preſcribed them. If therefore either of theſe ſuffer, or the ſtate and condition of either be altered, at leaſt from better to worſe, it muſt be on account of that Being, for whoſe ſake they were at firſt made, and for whoſe welfare they are ſtill continued in exiſtence. And when they can be no longer of any ſervice to man (for whoſe uſe they were originally formed) it would be needleſs to preſerve them alive. If therefore man, or the whole ſpecies of the human race, except a few righteous, ſhould in ſuch a manner offend their Maker as to deſerve a total extirpation; it would be but requiſite that the brute creation ſhould periſh together with them, or at leaſt the far greater part of them, leſt at the renewal of the world the ſmall remnant of the human race ſhould be overcome by thoſe very creatures that were made for their benefit. And the *manner* in which they were deſtroyed, and the *diſtribution* of their bodies or bones after, indicate the *wiſdom* and *goodneſs* of that GOD, who *in judgment always remembers mercy*; for by burying of them in the earth, eſpecially in the *moſt ſolid* parts (which are of the greateſt ſervice to man, and therefore are daily dug and brought up to light) they are, and will remain, to each ſucceeding race of men as an evident proof of the truth of the deſtruction and of the wrath of GOD againſt a world of ſinners; ſo that *though dead* they ſtill *ſpeak* in the lively oracles of GOD and in the book of nature.

THE certainty that *this globe* has been deſtroyed *by a flood of water* may ſerve, not only as an argument againſt the *eternity* and *immutability of nature*, but alſo to convince us of another *ſcriptural* truth, that it will be deſtroyed *by fire*, 2 *Pet.* iii. 10. To an undiſcerning eye there are as few marks of *fire* in the earth, as there were of a *ſubterranean Abyſs of waters* to the ante-diluvian ſcoffers. And the general conflagration ſeems at preſent as incredible, and is as much ridiculed, as the Deluge was before it happened.. And though GOD could conſume the whole world, if he pleaſed, by the blaſt of his mouth, yet he hath ſo conſtructed the earth, and ſtored it with ſuch combuſtible materials, as coal, ſulphur, bitumen, *&c.* as to afford us ſome kind of pre-ſignification of it's final deſtruction by fire. And this event ſeemed ſo probable in the opinion of an heathen philoſopher, who had carefully examined the internal ſtructure of the earth, that *he wondered it had not come to paſs ages ago*; for *Pliny* in his ſecond book of *Nat. Hiſtory*, chap. cvi. cvii. after having given an account of ſome fiery mountains and other parts of the earth that are the ſeats and ſources of fire, makes this reflection: " Seeing, then, this element is ſo fruitful that it brings forth itſelf, and multiplies and increaſes from the leaſt ſparks, what are we to expect from ſo many fires already kindled on the earth? How does nature feed and ſatisfy ſo devouring an element, and ſuch a great voracity throughout all the world, without loſs or diminution of herſelf? Add to theſe fires we have mentioned the ſtars and the great ſun; then all the fires made for human uſes; fire in ſtones, in wood, in clouds, and in thunder. *So that it exceeds all miracles, that one day ſhould paſs without ſetting the whole world on fire; excedit profecto omnia miracula, ullum diem fuiſſe quo non cuncta conflagrarent.*"

But why need I mention *one* or *two* ſcripture philoſophical truths only, as verified by *the natural ſtate* of the earth? I have already ſhewn, that the *Moſaic account* of *the manner in which the whole earth was at firſt formed, together with the powers of the heavens or airs, and the manner in which it was deſtroyed and re-formed at the time of the Deluge*, are philoſophically juſt and literally true: and therefore that the biblical philoſophy is ſtrictly conſiſtent with nature. And ſeveral reaſons may be given why it ought to be ſo.

Firſt, Becauſe when *Moſes* wrote, the *world* was *wholly given to idolatry*, and this idolatry conſiſted in the worſhip of the heavens, earth, *&c.*---*the ſun, the moon, and the ſtars, and all the hoſt of them*, and of no other god or gods (except the true) do we ever read throughout the Old Teſtament. Now the moſt likely and effectual way to deſtroy this idolatry would be, to *reveal a true ſyſtem of nature*—to declare that the heavens were *created* (and ſo not God)—to ſhew how, ſtep by ſtep they were *formed* into *a machine for the ſervice of man*; and therefore that man ought not to be ſubſervient or pay adoration to them; and to omit declaring this, would be to leave and encourage men in their idolatries: eſpecially, if any account of nature was given in the Bible; and as ſuch is undeniably laid down, principally, in the firſt chapter of *Geneſis*, that muſt undoubtedly be true.

Secondly, Beſides, was not the Bible written for *this* age, as well as thoſe in which the writers of it lived? Nay, was it not written *for*, and therefore is to continue *to*, *all* ages?—Did not the Spirit of truth (in whoſe ſight *a thouſand years are but as one day)* very well know, that certain ſelf-ſufficient mortals would riſe up (after his revelation was *delivered* and *ſealed)* contradict his word, diſpute his philoſophy, and preſume to give a ſyſtem of nature out of their own brains; when it was as much, or rather more impracticable for them to give the true one, than it would be for a man—who had never ſeen a watch, or any machine like it, and was utterly ignorant of the movements within—to account for the motion of the hand, in it's regular circuit, round the dial-plate? Did not the Spirit of truth, I ſay, know all this? And would not his goodneſs prompt him, and his veracity induce him, to reveal a true ſyſtem of nature; that thoſe who had humility to own that God alone could give an account of his works, and were willing to ſearch his word for that inſtruction, ſhould there find the ineſtimable treaſure? And as God has vouchſafed to to give an account, who will preſume to affirm that that account is untrue, or accommodated to the current, though falſe, opinions of the times?

Thirdly, "To ſuppoſe the Divine Being (ſays Mr. *Pike* in his *Philoſophia Sacra*, p. 12.) to conform himſelf in his word to bare outward appearances, or to the falſe apprehenſions of the vulgar, is ſuch a ſuppoſition as we will not admit in any other caſe. The alluſions and references of ſcripture to *hiſtory* or *geography* and the like we maintain to be juſt and exactly true, and look upon ourſelves as bound to believe and maintain the *hiſtory* as well as the *theology* of revelation; and why then ſhould we not for the ſame reaſon account ourſelves obliged to maintain, that there is no miſtake or miſrepreſentation in it's deſcriptions of and references to *natural things?*"

Fourthly, "There are many philoſophical paſſages, that cannot be regularly explained as conformed to outward appearance, or the opinions of men. Witneſs the *Moſaic* account of the creation and formation of all things. Can any one affirm that the firſt chapter of the Bible is built upon a falſe hypotheſis, or accommodated to vulgar apprehenſions? And if it be not true either in appearance, or in reality, I ſee not how it can be true in any reſpect."

Fifthly, "We muſt not ſuppoſe the word of God to ſpeak falſe in any caſe whatſoever. *It's hiſtory*, *it's chronology*, and *it's philoſophy* muſt be in fact as true as *it's theology*. If we ſuppoſe any part of the divine word to be erroneous, this ſo far ſhakes the authority of all the reſt. And as God knows all things perfectly, we muſt believe him the fitteſt to give us an account of his *works* as well as of his *nature*."

Sixthly, "There is a *neceſſary connection* between the knowledge of *natural* and *ſpiritual* things; ſince ſcripture conſtantly, or at leaſt very frequently, refers our thoughts to natural ideas, in order to illuſtrate ſpiritual truths. And for this reaſon it appears to be of ſome conſiderable importance, that the natural ideas referred to be ſtrictly juſt and true, in order to be a proper foundation for a right conception and repreſentation of divine matters."

Or, as Mr. *Spearman* (in his *Enquiry after Philoſophy and Theology*, p. 254.) has moſt judiciouſly ſtated this caſe: "When the ſenſes have acted upon any material natural object, what they take in and retain by that action is the *inward ſenſe* or *idea* of the thing; and the knowledge we gain by ſuch repeated acts of the ſenſes upon nature and her operations is *natural knowledge* or *phyſics*. When we make uſe of theſe natural and acquired ideas to help us to ideas of ſpiritual things, the knowledge we, by theſe means, gain of God and his operations is *ſuper-natural knowledge* or *metaphyſics*: and ſo by *things* that are *viſible* within the reach of our ſenſes, and *which we can underſtand*, we are led to the knowledge of *things which are inviſible*, without the reach of our ſenſes, and which we could not otherwiſe underſtand.[f] It is agreed, that we have no innate ideas; and that nothing can be in the underſtanding but what comes in by the ſenſes. We therefore either can have no ideas of GOD and ſpiritual things, or we muſt take them in by our ſenſes. But our ſenſes cannot act immediately upon ſpiritual objects, becauſe they are not the objects of our ſenſes; therefore we muſt have our ideas of ſpiritual and inviſible things from natural and viſible things. But natural and viſible things can give us no ideas of ſpiritual and inviſible things, unleſs they bear *ſome analogy* to them, are the *ſimulacra* or *images of them.* And if they be the images of them, they muſt have been *ſo created* and framed by GOD the Creator, and *to this very end*, and with *this very deſign:* for nothing could be created by infinite wiſdom but with foreknowledge and deſign. And ſince we find in the ſcriptures GOD and ſpiritual things repreſented to us under the ideas and names of viſible and ſenſible things, it is a demonſtration in itſelf that GOD framed them to repreſent himſelf, and what he preintended to reveal of himſelf and his ways to mankind."

So that we may well ſay with *Tully* from *Plato*, *Neceſſe eſt hunc mundum, quem cernimus, ſimulacrum eſſe æternum alicujus æterni. It cannot be but that this world, which is viſible to us, ſhould be a ſtanding type or repreſentation of ſomething eternal.*

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[f] As *Rom.* i. 19. *That which may be known of God is manifeſt among men; for God* himſelf εφανερωσε *hath* ſhewed *it unto them.* [hath *manifeſted* it; for otherwiſe it could never have been known.] Γαρ, *For* [Inaſmuch as] *the inviſible things of him from the creation of the world are clearly ſeen, being underſtood by the things that are made,* [viſibles being made ſubſtitutes for inviſibles] *even his eternal power and Godhead.*

So alſo *Milton*,

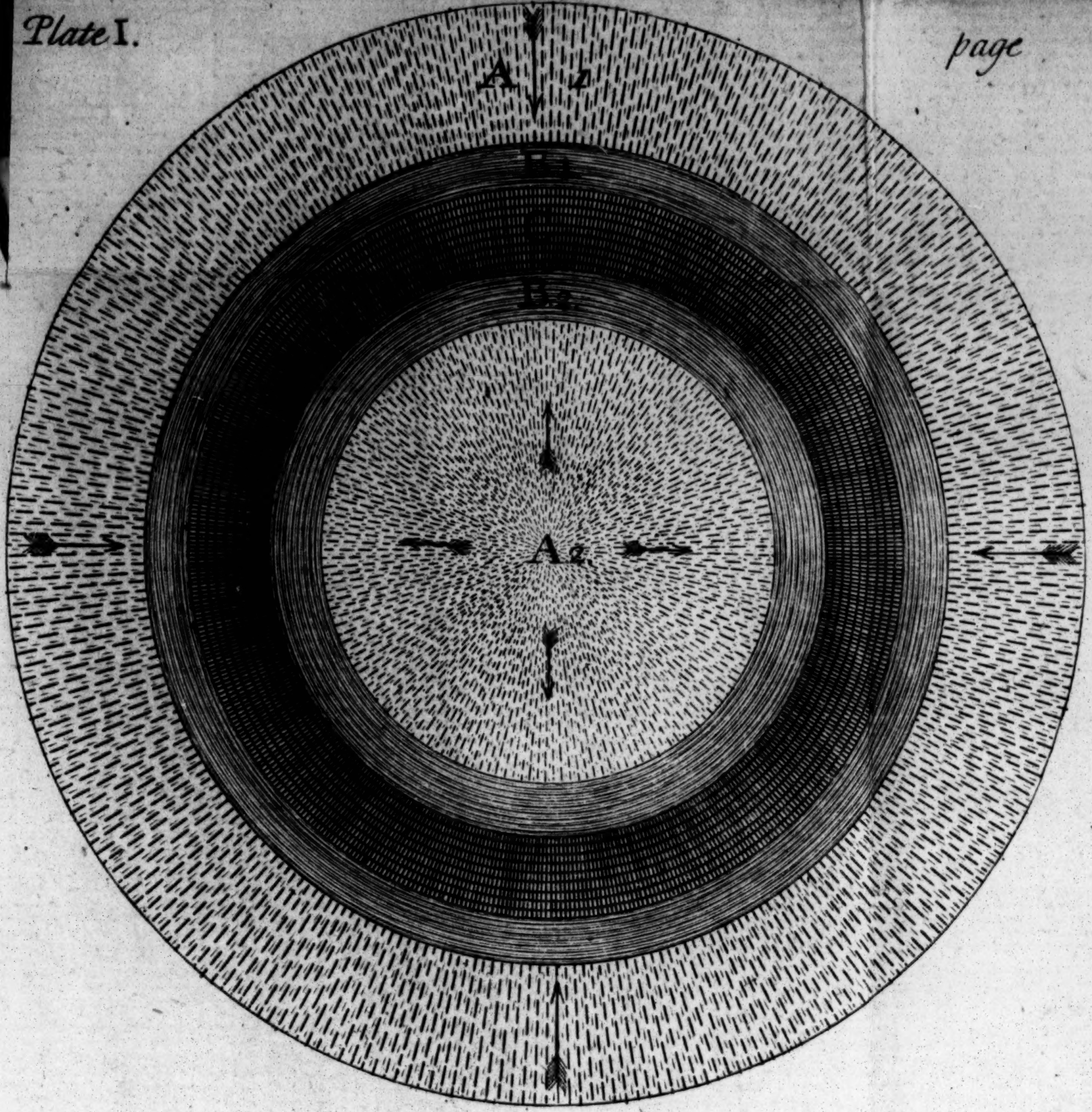
Earth is the ſhadow of heav'n, the things therein
Each other like, more than on earth is thought.

I SHALL leave the pious reader to purſue *this thought* (as I want words to expreſs the *height*, *length*, *breadth*, *and depth* of it)—to the conſideration of *the new heavens*, and *new earth* (ſpoken of by St. *Peter* 2 Ep. chap. iii.) *wherein dwelleth righteouſneſs*;—to *the great city* (Revel. xxi.) *the holy Jeruſalem that is to deſcend out of heaven from* GOD, *having the glory of* GOD; *whoſe light is like unto a ſtone moſt precious, even like a jaſper ſtone, clear as cryſtal*; which *hath a wall great and high, and twelve gates, and the wall of the city hath twelve foundations*. And *the city lieth four-ſquare*; *the length, and the breadth, and the height of it are equal*. And *the foundations of the wall of the city are garniſhed with all manner of* precious ſtones. *The firſt foundation was* jaſper; *the ſecond*, ſaphire; *the third*, a chalcedony; *the fourth*, an emerald; *the fifth*, ſardonix; *the ſixth*, ſardius; *the ſeventh*, chryſolite; *the eighth*, beryl; *the ninth*, a topaz; *the tenth*, a chryſopraſus; *the eleventh*, a jacinct; *the twelfth*, an amethyſt. *And the twelve gates were* twelve pearls; *every ſeveral gate was of one pearl*; and *the ſtreet of the city was* pure gold, *as it were tranſparent* glaſs. *And I ſaw no temple therein: for the Lord God Almighty and the Lamb are the Temple of it. And the city had no need of the ſun, neither of the moon to ſhine in it: for the glory of God did lighten it, and the Lamb is the light thereof.*

FINIS.

21 JU 59

Plate I. *page*



A. 1. *The outward Expanse.* } { *At firſt, dark Air on yᵉ outside,*
A. 2. *The inward Expanse.* } { *and in the inside of yᵉ Earth.*

B. 1. *An orb of water, ſeparated by the action of the outward Expanse from the Earthy maſs: called* the waters under the firmament.

B. 2. *An orb of water, ſeparated by the action of the inward Expanse from the Earthy maſs: called* the waters above the firmament.

C. *The ſolid ſhell of the Earth formed, between two orbs of water, into various concentric ſtrata of ſtone, coal, &c. by the action of the two Expanſes.*

The Three ſeveral orbs B. 1. B. 2. *and* C. *were at firſt confuſedly mixed together, and then called* the Earth without form.

NB. This Plate repreſents alſo the Earth during the height of the Deluge.